VERMONT *Life*

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In This Issue — *Old Vermont Churches* • *Mt. Snow* • *Vermont Slate*

VOLUME X WINTER 1955-56 NUMBER II

VERMONT *Life*

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BACK COVER SCENE *by Robert Holland*

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Editor's Uneasy Chair

Perhaps it was Don Marquis' column which purposely compounded error in the guise of corrections to exasperate his readers. But we can't so claim for last Summer's Daniel Webster Day story. As readers infinitum pointed out, the campaign in question was for Wm. Henry Harrison, not Benjamin. Further, Townshend somehow dropped its "h" and the pictured vehicle may be a *coupe' Rockaway* or *hack* but certainly isn't a *barouche*.

Van Buren was Harrison's election rival, not Webster, who had opposed Harrison at the Whig convention. The text, therefore, seems to draw wrong conclusions, from Webster's bitter remark to Choate, who, to make things complete, was given a nonexistent middle initial.

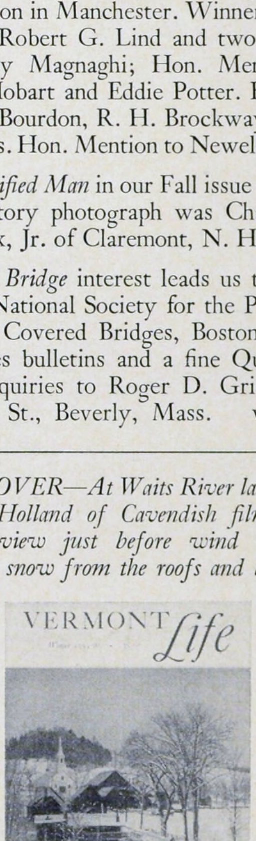
Index at last. We're happy to report that late next summer a very complete index covering *Vermont Life's* first 10 years will be available. The Elm Tree Press and the State Library are collaborating on it.

The Spring issue, as last year, will carry full presentation of the color and black & white photographs awarded VERMONT LIFE medals at the Vt. Photographers' Exhibition in Manchester. Winners were: Color: Robert G. Lind and two awards to Dolly Magnaghi; Hon. Mention to Alice Hobart and Eddie Potter. B & W: Robert Bourdon, R. H. Brockway, Chas. L. Toms. Hon. Mention to Newell Green.

Unidentified Man in our Fall issue Morgan horse story photograph was Charles V. Paddock, Jr. of Claremont, N. H.

Covered Bridge interest leads us to speak of the National Society for the Preservation of Covered Bridges, Boston, which publishes bulletins and a fine Quarterly. Send inquiries to Roger D. Griffith, 31 Federal St., Beverly, Mass. W.H. JR.

THE COVER—At Waits River last winter Robert Holland of Cavendish filmed this typical view just before wind whipped clinging snow from the roofs and branches.



Green Mountain POSTBOY

By WALTER HARD, SR.

THIS PUSH-BUTTON CIVILIZATION, into which the POST BOY is glad to have emerged, offers especial blessings to Vermonters at this time of year. Keeping warm is, for these few months, one of life's major activities. Equipped with modern heating systems, which start or stop automatically, at the desired temperatures, fed with liquid fuel which neither has to be shovelled or hand-carted, and which produces no dusty residue to be removed usually to the detriment of good housekeeping habits—for all these blessings the P.B. is devoutly thankful.

However, each step which has been taken toward this achievement has been a step away from one's basic independence. By his muscle and his knowhow the Head of the House used to furnish comfort for his household. He was HE. Now his value as the head of the house has been reduced to that of a wage slave, his strength and skill showing only on receipted bills from the power and oil companies. Let us look back through the years, as we sit warmed, praises be, front, back and sides, night and day, by these modern robbers of independence.

THE WOODLOT used to be a valuable piece of real estate without which no good farm existed and in the ownership of which many a villager felt himself secure along with his heirs and assigns. Properly cut a fairly small acreage would furnish a crop year after year. Consider the steps necessary to the transformation of a growing maple to fuel for the burning. First was the trip, on a cold morning, preferably with a suitable amount of snow on the ground to allow the use of a sled, to the woodlot. There certain trees were selected, either sawed with a cross-cut or chopped down with proper thought to where they would fall. Then, having trimmed off the branches too small for use, the cutting up began. It might all be sawed up or chopped into four-foot lengths, and these pieces split into sections comfortable for handling and for later hand sawing. Perhaps it was piled in one-cord piles right there on the lot. Such would be the method if the wood was to be sold. For home consumption it might be left in pole length and, with one end on a sled and the other dragging, be transported to the farm and not too far from the woodhouse door. To finish up this lot of fuel, often a drag saw was brought in, run by horsepower or later a gas engine and the big logs were sawed into pieces of proper stove length—maybe twelve, fourteen or sixteen inch. Splitting the straight grained chunks was really fun after they had been duly exposed to steady cold, and a man handy with the axe could make a sizeable conical pile in a good day. When all was split—except that small pile of knotty chunks which would later be as stubborn about burning as they were about splitting—sun and wind got to work and perhaps just after haying, into the chip-carpeted floor of the shed, the pile disappeared. Probably Grandfather took a hand at piling.

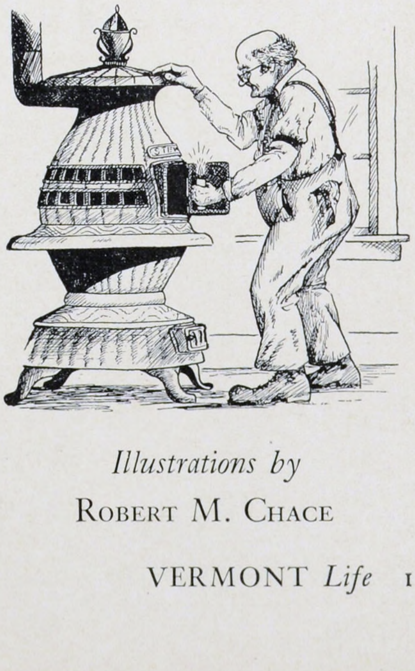
THE POST BOY'S FATHER always bought five cords of body maple from Hugh Townsend. The wood was sure to be sound, the pile tight and the dimensions a little over if anything. The P.B., equipped with a small red sawhorse and saw, and with energy incredible as he views himself now, used to pick out the smaller pieces at once, and manage to work up a few before Than Towsley came on the scene. A cord a day was his stint and the P.B. soon discovered other things much more to *his* liking. Then the pieces were split, and before they were dry wheeled to the barn and there piled on the side where two low doors allowed the air to circulate. If you aren't tired out by now we'll go on to picture the following winter when armful by armful the still sweet-smelling maple was transferred day by day to the woodboxes—whose filling, or not, marked the moral character of the youthful P.B.

There is a nostalgic charm in the good old chunk stove or the fire flickering on the ceiling from the tipped lid of the cook stove. The P.B. is willing to leave it there, with no regrets.

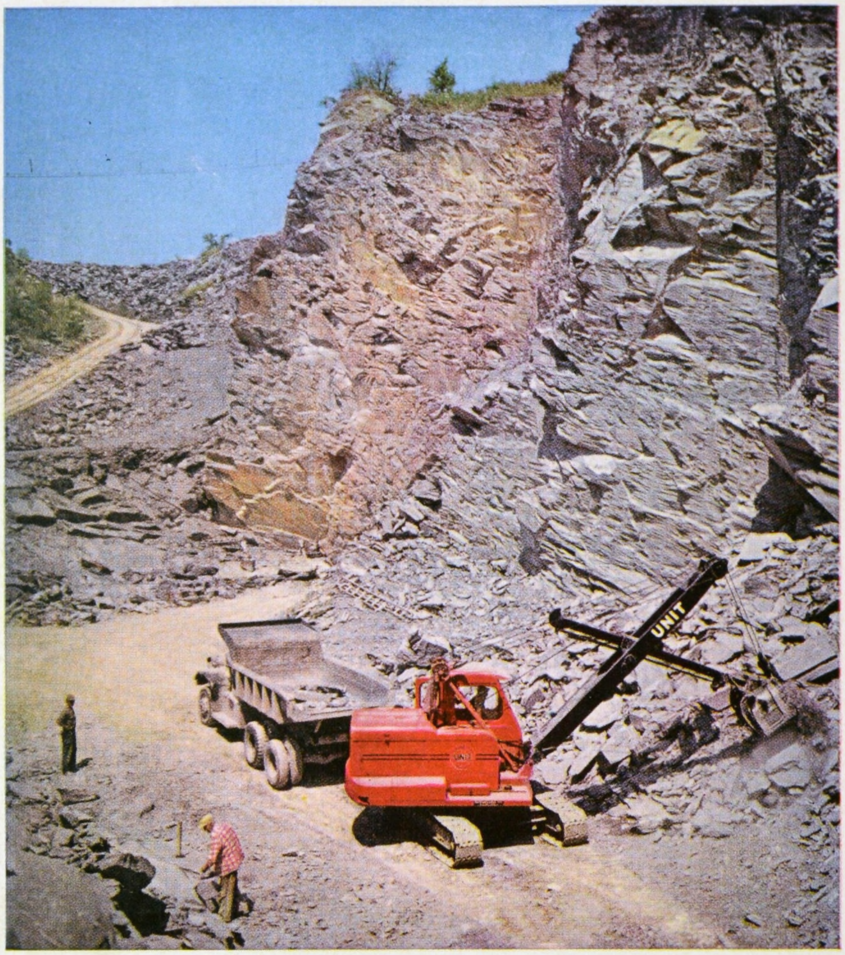
NOT TO APPEAR TOO ANCIENT the P.B. hastens to say that coal was in general use in his boyhood although sometimes there were arguments as to its advantages over wood. Also its use may have carried certain social distinction somewhat earlier, perhaps because it was obvious that it was to be obtained only by spending money.

One coal burning stove which cheered the sittingroom of the P.B.'s home, a "Stewart" if he remembers aright, was of the self-feeding variety. The cylinder above held a hod or more of coal and this fed down as combustion took place in the pot-bellied section. This middle section had doors equipped with isinglass through which the inner glow was visable, and this had psychologic powers, recognized then, but not by any such name. It looked warm and made you feel warm. It was one of these stoves which warmed the postoffice, or was supposed to do so, on a cold January morning when Bert Orvis, the Postmaster's tardy son, opened the door preparatory to distributing the mail which arrived at the ungodly hour of six-thirty. He was late and, perhaps through his own neglect, the fire had gone out utterly and completely. Farmers, returning from a frosty trip to the cheese factory would soon be arriving to get the mail and perchance gather a bit of warmth. Bert was ready when the first patron arrived and watched him back up to the glowing Stewart as he gave his mail a hasty going over. Others came in and peeled off mittens the better to absorb the promise of warmth which their eyes discovered. When the last man had gone Bert opened the doors of rosy isinglass and removing the candles he proceeded to the building of a proper fire.

(*Continued on page 61*)



Illustrations by
ROBERT M. CHACE



In Poultney's Eureka quarry modern equipment removes the waste slate more quickly.

Chunk of slate for milling is chained, lifted out of quarry by carriage and cable.

VERMONT

By FRANK F. ROGERS

Color by WARREN F. ANDERSON

FOR THE GEOLOGICAL formation of Vermont slate, we go back anywhere from 2000 million to 500 million years, during the Cambrian and Pre-Cambrian eras, when thin layers of silica and alumina sedimentary deposits were laid down in the ocean depths over what is now a part of Rutland County, Vermont and Washington County, New York.

In the marvelous alchemy of creation, many chemicals, in varying degrees, were mixed with this clay, imparting to it the beautiful colors for which Vermont slate is known today. Subjected to heat and tremendous pressure, this clay solidified, rock was formed, and during one of the cataclysmic upheavals of creation, our beautiful Taconic Range of mountains was thrust up out of the deep, making available one of Vermont's richest mineral deposits. This stretches for a distance of about forty miles along the western border of Rutland County. In places this spilled over on to what is now Washington County, New York, giving to that County the distinction of having the only known deposit of red slate in the world.

For the earliest use of slate as a roof covering, we cross the Atlantic to Wales.

Conway and Caernarvon Castles, 1282–1284, historians tell us, were both originally roofed with slate.[1]

The earliest authentic information regarding the slate industry at Penrhyn is to be found in an ode by a Welsh bard, Guto'r Glyn, a native of Llangollyn. He is addressing Dr. Richard Kyffin, Dean of Bangor, 1480–1502, tendering an order for a ship load of slates from Aber Ogden (the estuary of the River Ogwen) to be sent to Rhuddlan.[2]

In 1570 another bard wrote some verses to the Dean of Bangor, Rowland Jones:

Moes ddau gwpyl o fulod,
I ddiddosi bwythynod
O lechau naddedig. . . .

("Send me a load of shaped slates, capable of being carried by two couples of donkeys, to roof cottages.")

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[1] *We are indebted to the Welsh American* Slate Magazine of America *for information on the early history of slate, in an article by R. W. Griffiths, published 1953.*

[2] *This ode is found in the Peniarth manuscript, National Library, Aberystwyth.*

SLATE

Leads the nation in quality
Is second only in quantity

Photography by

Geoffrey Orton

Since that time the slate industry has been closely linked with Wales, and here in America with her sons and daughters who migrated to this country in the early part of the nineteenth century. The Welsh have continued actively in the development of this branch of Vermont industry ever since.

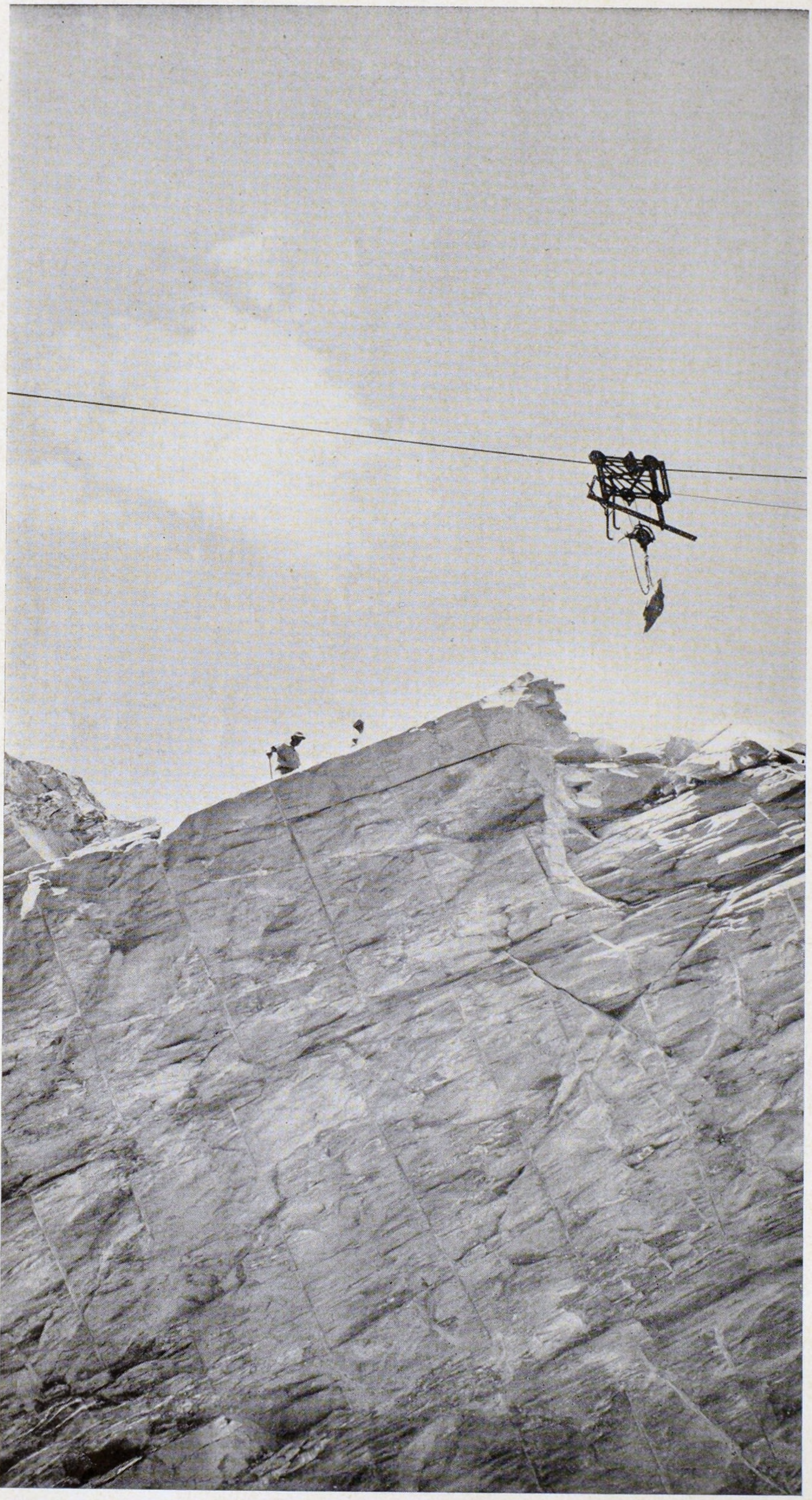
Returning to Vermont: "The first quarrying of slate in Rutland County was done by Col. Alanson Allen of Fair Haven, in 1839, in a place called Scotch Hill, about a mile north of Fair Haven village," according to Smith & Rann's *History of Rutland County*, 1886.

"The first quarry was worked for eight years, using the product for hearths, headstones for cemeteries, school slates and flagging for walks, before any roofing slate was manufactured. It was one year more, in 1848, before the first roof was covered with Vermont slate. This was done by Col. Allen under the following conditions: He was to wait for one year for his pay, and if, in the meantime the roof should break down from the weight of slate, he was to receive no pay, but should pay all damages. The farmer was disappointed and the roof is good today."

The foregoing was written in 1886 and the barn still stands today—1955—on the farm of Stanley Kruml, about a mile south of Fair Haven village on Rt. 22-A. The roof is in perfect condition, with no sign of any slate ever having been replaced. A church in Granville, N. Y., built in 1849, still has its original slate roof intact—a wonderful tribute to the long lasting quality and efficiency of a good slate roof; in each instance over a century of perfect service through all kinds of weather. Let the substitutes match that if they can.

The Smith & Rann History lists, in 1885, 29 firms engaged in manufacturing structural slate, 37 in roofing slate, five mills devoted to marbleizing slate and one mill, located just east of Crystal Beach, Lake Bomoseen, Castleton, making slate pencils.

While structural slate is milled, roofing slate is split from stone which fractures more easily. Above are stacks of structural slates sorted by size and thickness.



Tilted striations, vertical drill-marks show on quarry face. Cable and carriage above.

The process of marbleizing slate consisted of floating oil paints on a tank of water. After having been shaped to final form by sawing, planing and smoothing by sanding, the piece to be marbleized was dipped in this tank. The paint adhered to the surface in a variety of patterns and colors closely resembling marble or onyx. It was then baked and polished and would so closely resemble marble or onyx as to deceive anyone except on very close examination. The Victorian period saw great quantities of mantels, fireplaces, shelves, clock cases and bric-a-brac of all kinds made of marbleized slate. But with the passing of that period the demand ceased and today it is one of the lost or forgotten arts and the articles made in those days are fast becoming collector's items.

The term *structural slate* means slate sawed to size and shape, planed and sanded, and covers a wide variety of items used in construction, such as window sills and lintels, slabs for shower stalls, stair treads, flooring, base, etc. These pieces are sawed to shape and size, planed, and smoothed on a rubbing bed, which is a large flat horizontal metal disc revolving under a stream of sand and water, which imparts a smooth finish to the surface.

In quarry bottom (right), *skilled shovel operator maneuvers a slate slab onto truck.*

The largest producer of structural slate in this region is the Vermont Structural Slate Co. of Fair Haven, which began operation as the Fair Haven Marble and Marbleized Slate Co. in 1852 and has continued operating quarries and mills in the Fair Haven–Poultney section ever since. Edwards Carpenter, president, expresses confidence in the continued expansion of the slate business, and as evidence of such confidence his company recently purchased another mill that has been idle for several years.

Mountains of waste slate (above), *testify to years of work. Slate operation in Dummerston, Northfield areas is now abandoned.*

Production of slate for flagstone purposes is greatly on the increase. While some of this is formed at the mill in irregular rectangular sizes, with sawed edges, most of it comes in random irregular sizes and shapes, split ¾ to 1 inch thick, in all of the several stock colors. John Hadeka of Poultney, with quarries in that town and red quarries in Hampton, N. Y., is a large producer. This flagging, in a variety of colors, is used largely for terraces, walks, patios and swimming pools, mostly in the natural finish as it comes from the splitter, without planing or sanding. Flagging also is produced by Rising & Nelson, West Pawlet, who are developing other uses for slate. They are making a line of iron furniture with slate tops; also tops for cocktail tables and sideboards that will not stain or mar. Another product of this factory is a synthetic slate top for laboratory tables that is impervious to acids. These are blocks 1½ thick, 4 ft. by 2½ ft., made of slate that has been pulverized, heated and combined with a synthetic plastic resin, subjected to a pressure of 3000 tons, cured and sanded ready for use.

Quarried slate rock granules also are used for roofing purposes. Staso Milling Co., with offices at Poultney and plants for grinding the green slate at Castleton, and for red slate at Hampton, N. Y., is now the only operator in this field. At one time it was deemed possible to use the huge piles of rubbish for this purpose. However, it was found more profitable in the long run to use freshly quarried rock. Through a process of grinding and screening, most of the rock goes into granules. The balance of perhaps 5 per cent slate flour is used as filler for linoleum, plastics, etc. With about 75 per cent of the granules artificially colored, it is sold in several shades of green, red, aluminum and black, and when combined with asphalt and other ingredients into slate surfaced shingles comes into direct competition with roofing slate, the real beginning of the industry.

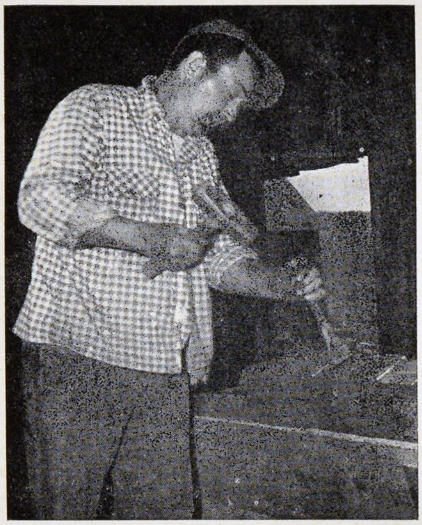
Soon after the first quarries were opened in the Fair Haven–Poultney section, from 1848 to the early 1860s, the news spread to Wales and many Welsh quarrymen came to this locality to engage in the manufacture of roofing slate, bringing the skills of their native land with them. Coming from generations of slate makers, it is no wonder they were successful in developing the industry in the new country. The very name Wales derives from the Latin *Cambria*—the era in which the slate was formed. And today we find the oldest and largest slate quarry in the land of the Comru—Wales. In the early days quarries were opened with pick, shovel and wheelbarrow. Drilling was entirely by hand, one man holding and turning the drill as one or two struck it with heavy sledge hammers. The rhythmic clink of the hammer on the steel drill was music to the quarryman's ears.

When sufficient depth had been reached in the pit to warrant it, a derrick was erected, with boom extending over the excavation. A horse on the end of a sweep power served to turn the windlass to hoist the load out of the pit. Black powder was used exclusively in blasting. Today steam or electricity have replaced the horse, and pneumatic drills the old hand process. But powder is still used largely in blasting out the good rock because of its less shattering effect than dynamite. An innovation today in many quarries are the ramps extending down into the pits for trucks, loaded by power shovels, to bring the rubbish up and out and cart it to a distance.

Only about ten to fifteen per cent of the rock that is quarried is fit to be used as roofing slate, flagging, sculping stone or structural slate. The good blocks, some weighing upwards of a ton, are hoisted out by cable and carriage, lowered to the ground near the *shanties* to be worked up, or carted to the mill for processing there.

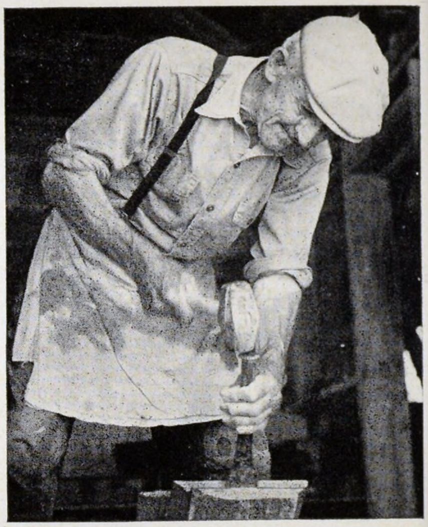
The *shanty* crew consists of a block cutter and helper, splitter and trimmer. First, the block cutter drills the block, inserts a tapered plug between tapered shims so the pressure against the sides of the drilled hole will be equal, and with a sharp blow on this plug with *beetle* or sledge the block breaks nearly straight across. It is further reduced to sizes easy to handle by splitting and *sculping*. Having been split to a thickness of two to four inches, a crease is cut across the edge of the block, it is set up on edge and with a sharp blow of beetle or heavy chisel and hammer, again it breaks nearly straight across. This process is called *sculping*. The smaller blocks are now moved into the shanty where the splitter takes over. Seated on a low stool, a pile of blocks within easy reach, he keeps the edges moist with a swab on the end of a stick that he dips into a bucket of water. With a wide, thin chisel and wooden mallet he splits off successive layers of such thickness as may be desired. Usually $\frac{3}{16}$, $\frac{1}{4}$ or $\frac{3}{8}$ inches thick, they may run up to $\frac{3}{4}$ inch for some special job. The unformed slates are piled within easy reach of the trimmer who is the next man to take over.

The trimming machine is a heavy curved blade similar to a lawn mower's



Eberhard

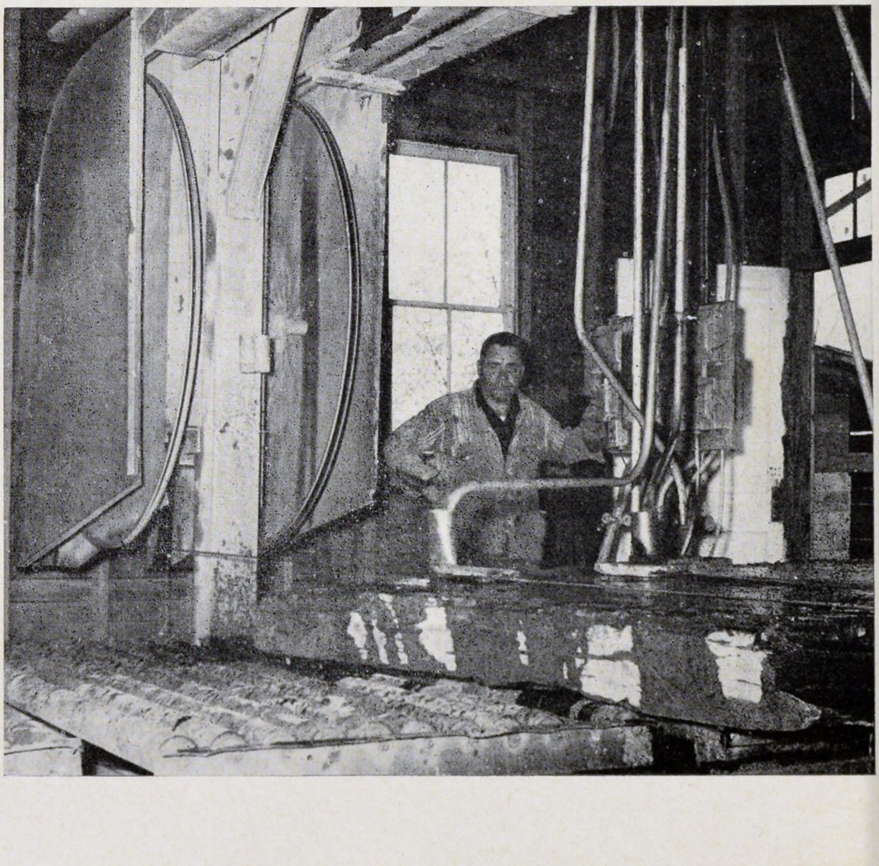
Creases across grain precede sculping blow.



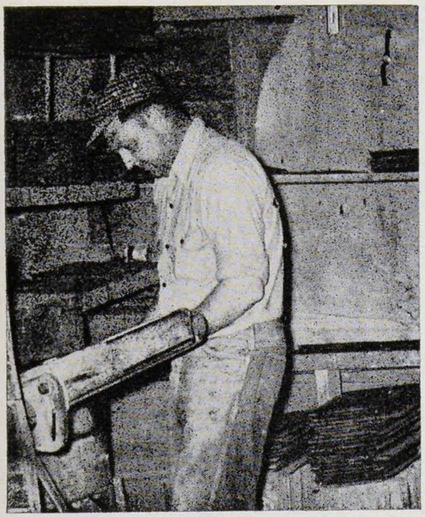
Layers then are split off for state flagging.

Slab of slate for structural use is shaped by double wire saw, later will be planed.

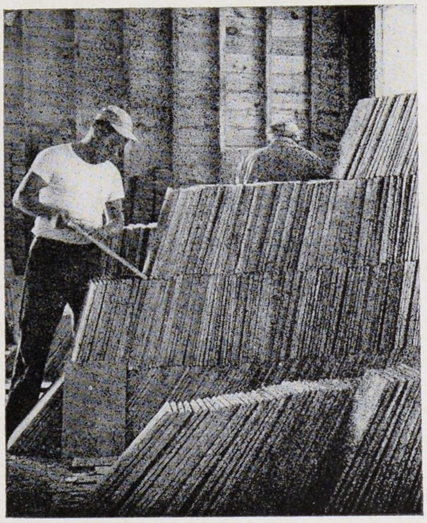
Eberhard



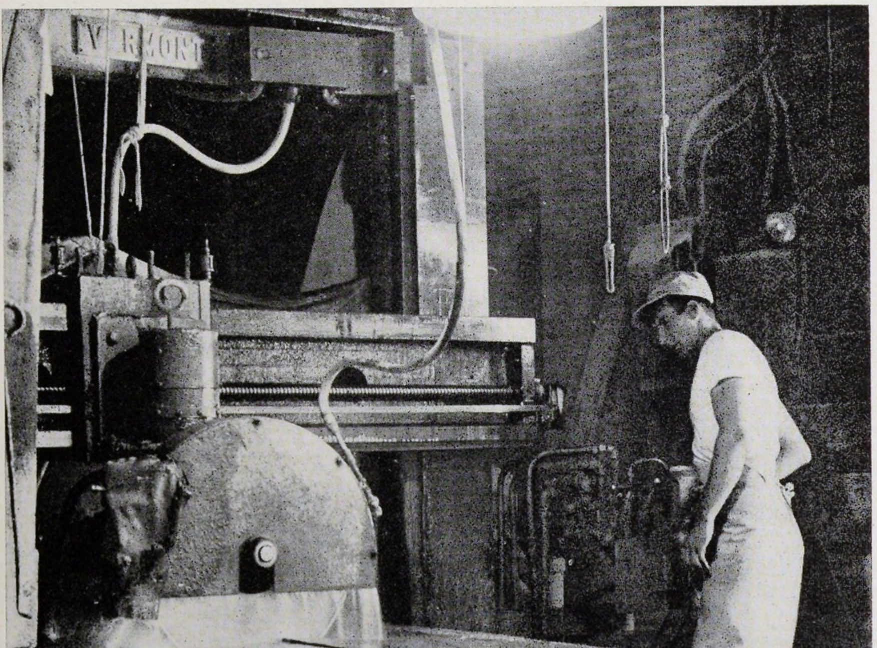
with heavy balance wheel. This is operated by foot treadle or electric motor. At right angles to the revolving blade, on the left side, next to the balance wheel, is a gauge for obtaining correct sizes. This is marked off in 1-inch notches from 6 to 12 inches and 2-inch notches up to 24 inches. As the trimmer picks up an unformed piece he decides instantly the size it will make to best advantage. Laying it along the ledger, the revolving blade knocks off one side. It is then turned a quarter way around, an end knocked off and the next side and end follow. There are thirty-nine standard sizes of roofing slate, ranging downward from 24 x 14 to 10 x 6. Among slate men it is customary to give the larger dimension first, such as 24 x 14 or 12 x 8 instead of the other way around.


Eberhard

Trimmer shapes roof slates to uniform sizes.


The finished slates are stacked by size.

Circular saw is used for shallow cuts. Much stone-working machinery is made in Vermont.



The trimmer places his finished slate in a pile of corresponding size on a shelf and at the end of the day they are carried out to the slate yard and piled with one slate projecting out an inch or so to mark every hundred slate. These are the men who have much to do with the profit of operation, as it is to their skill and knowledge of how best to break, split and trim that the operator looks for success in producing good roofing slate.

Slate are sold by the square, which means enough slate to cover 100 square feet of roof laid with a 2 or 3-inch head lap. The usual thickness, unless otherwise specified, is $\frac{3}{16}$, $\frac{1}{4}$ or $\frac{3}{8}$-inch, weighing from 700 to 900 pounds per square.

There are many large blocks taken out of the pit that will not split satisfactorily, due to faulty foliation or other natural causes. A use for this class of stone has been found in a fine veneer for buildings. Through the process of sculping they are reduced to blocks of varying length, from 3 to 4 inches thick and about 4 inches wide. Coming in a variety of colors, with beautifully waved edges, they make an attractive veneer for fine houses.

No one can tell the story of slate in Vermont without paying tribute to the men and women who left their native Wales and came here to help develop this industry. For many years they gathered at an annual music festival known as an *Eisteddfod*. Prizes were given for the best in bands, singing and poetry. To call at a Welsh home in those days was to be invited to stay for *te bach*—little tea, served with *bara brith*, raisin bread. This locality is still replete with Welsh names—Jones, Roberts, Thomas, Hughes, Lloyd, Williams and Evans and many others. Half a century ago it was not uncommon to find such purely Welsh given names for the girls as Myfanwy, Gwen, Blodwyn and Megan; for the boys, Idris, Idwal, Llewellen, Glyn, Cadwgan and Gwillym (pronounced Quillym). But today the surnames are different, with many Polish, Irish and Italian names intermingled with the Welsh, truly a melting pot of the best Europe has had to offer.

With the many new uses being found for slate, and the proof by years of endurance, that no other product makes as good and safe a roof as Vermont slate, quarry operators look forward to years of prosperity in this, one of Vermont's earliest major industries. For beauty, safety, long life and efficiency no substitute can begin to equal Vermont slate. END

Lilliputian Business

Readex Microprint is running the world's largest printing project in a converted Vermont funeral parlor.

By George P. Morrill

Photographed by Geoffrey Orton

READEX MICROPRINT CORPORATION
W. W. WOODCOCK PLUMBING HEATING

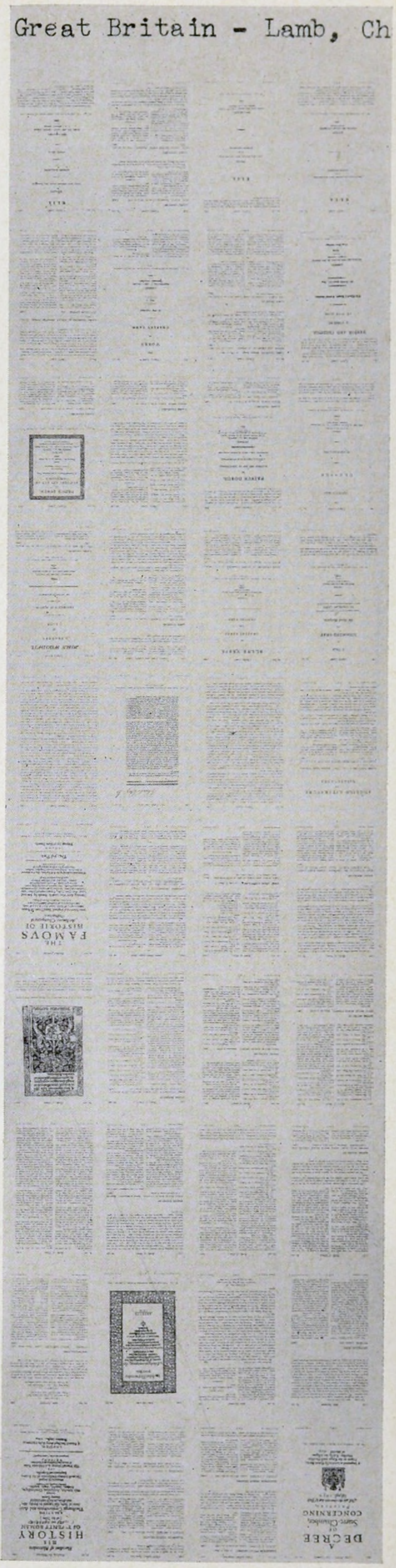
Modest Vermont headquarters of the Readex Microprint Corporation.

New England's habit of surviving her epitaphs has always confounded her critics. There's a sly satisfaction to us here at Chester that when Albert Boni set up the largest printing project in the world he chose a former Vermont funeral parlor for his plant. And since 1950 a whole new technique of word-reproduction has been born in this ancient building—where coffins yawned before.

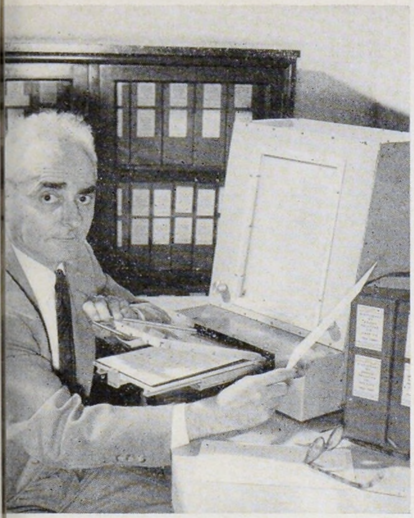
The project is the printing in greatly reduced size of the Sessional Papers of the British House of Commons. By greatly reduced, I mean pages scaled down to the dimension of your thumbnail. The words look like pepper sprinkled on a glossy card. The diagrams could pass for the tracks of a baby robin.

These minute pages are arranged on a 9″ x 6″ card—one hundred to a card. Slide the card into the Readex Microprint Reader, and the individual page springs to normal size on a screen. Turn a dial and succeeding pages move into view. At your fingertips, one of the world's great sources of historical knowledge flashes by.

The project is immense—the complete



Actual-size section of a Microprint card carries 40 pages from Charles Lamb's works. This engraved reproduction, unlike actual card, can't be read under magnification.



Publisher Albert Boni, (using a Microprint Reader), began his study of Microprinting in Chester and evolved the Readex system some dozen years later.

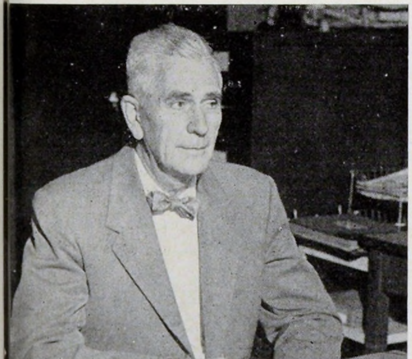
records of the House of Commons from 1731–1900, as well as the Commons Journals from 1547 to 1900—millions of pages. Now libraries can fit the entire set in an area no larger than that required to store a few drums of maple sugar!

There are other projects too. Five thousand English and American plays (1500 to 1830), eight hundred volumes of Russian Historical Sources (in Russian), continuing volumes of United Nations and US Government publications—these and more are being Microprinted.

And as I write, plans have been completed for still another mammoth undertaking—the publication in Microprint of "every existent book, pamphlet, and broadside in the United States from 1639 to 1800." A *ten*-year task.

Chester's broad, tree-shaded street is Microprint's unusual plant site. Village green is in center distance.

Research Engineer Perry Bascom came here to retire, is busy as ever as Readex Company's Vermont manager. He's also a State Water Conservation Bd. member.



Microprint is not film-on-cardboard. Neither is it miniature photography on expensive, short-lived photo paper. It is *print* on long-lasting rag-paper card stock. *Print* made of carbon ink. It is produced by rotary press, and can be rolled off in thousands of copies at moderate cost.

The process itself (which Will Durant has called, "The greatest advance in printing since Gutenberg") was invented by Albert Boni in his southern Vermont home. Forsaking the career of a New York publisher—during which he produced works by Sherwood Anderson, Thornton Wilder, Van Loon, Proust, Trotsky, Will Rogers and others—Mr. Boni buried himself in a study of microphotography. Chester village, which a New York friend had recommended, he found ideally suited for the seclusion necessary to research.

This was in the mid-thirties. By the mid-forties, after weary excursions into physics, chemistry and practical mechanics, Mr. Boni had turned out perfect print so small that it could be read only with a ten-power magnifier. He had also produced a reading machine that some optical experts had declared impossible-to-build!

Today, at the Chester plant, there are special mechanical gadgets, special solutions, and special techniques. It can be said, however, that Microprint in its first stage exists as microfilm on a reel. It can be said, also, that the process of converting film to print has been refined to a point where letters can be re-produced too tiny even for the Reader. *Super* Microprint, that is, which you need a microscope to decipher. What this development offers for the future we ourselves can hardly imagine. But it should be fascinating.

The volume-potential of Microprint has intrigued men of letters everywhere. "Whole communities . . . should benefit from it." Marvin Lowenthal has written in *The Saturday Review*, "The entire contents of the New York Public Library, four million volumes, could be shelved in a 25 x 30 room. Volumes that are now the boast of Oxford or Harvard can be made available to the inhabitants of every prairie town. Mr. & Mrs. Jones . . . can have at their command, in the modest building on Main Street with *Carnegie*

Lorraine O'Conner of nearby Saxtons River (upper left), *attaches film to a mask, the first step of the Microprint reproduction.*

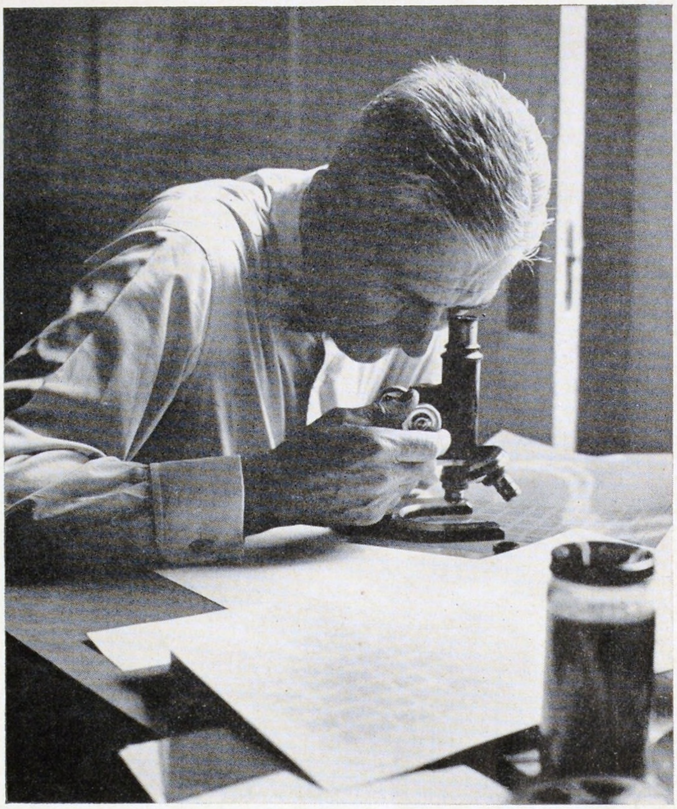
Marguerite Evans, (above), *who is forelady of the preparation work, operates a new electric splicer, which joins film sections.*

Microfilm on reels in proper sequence is made ready (at left) *for the Readex process, which will convert it to print.*

carved over the door, the sum of human knowledge."

Indeed, the time may come when Mr. & Mrs. Jones won't even have to go as far as the library. In the Readex files are stored micro-film copies of one thousand basic books—from the *Works of Plato* to Faraday's *Experimental Research in Electricity.* Someday these too will be on the market in Microprint, produced expressly for the private home. The Jones' living room will boast a virtual city library, stacked neatly in a 6′ x 8′ bookcase!

The Readex Corporation employs about twenty-five persons, half in New York City, half in Vermont. The New York crew micro-photographs original



Mrs. Evans, (above), *examines completed British Sessional Papers. The boxes hold 100 years of House of Commons records.*

Manager Bascom (above right), *examines test Microprint copy. Study continually goes forward to improve inks and paper.*

Mr. Boni developed special machines to produce the tiny print. Engineer Dean Severence (right) *checks a Readex press.*

copy from libraries all over the country, handles sales, and sets up projects. The Vermont staff converts the film to print and ships it out.

The old funeral parlor at Chester is humming. A couple of years ago Readex built on a fire-proof addition for its burgeoning inventory. Today, a visitor can walk down corridors piled high with neat red boxes. In each box, millions of Lilliputian words await shipment to colleges and libraries all over the world. A Vermonter may reflect with surprise that his state is home to one of the greatest accumulations of printed material on the globe.

And this is just the beginning. END

Country Play School

Photographed by Sonja Bullaty & Angelo Lomeo

By Florence Woodard

"Vermonters," said my city friend, Lil, "boast too much of their old-fashioned virtues."

"Maybe so," I offered. "Still, when old-fashioned virtues lead to the most modern advantages, who can quarrel with them?"

The next morning I took her with me when I drove our two youngsters down to Nursery School in Plainfield.

By the time we had covered the two miles there were six laughing, teasing little creatures filling the car. For I was part of the complicated car pool set-up that overcomes problems of distance in our little community.

We let the children out of the car and followed them into school. "Stay and watch," I said to Lil.

For the village of Plainfield, population 521, which sprawls along half a mile of the Upper Winooski valley, boasts a modern nursery school, organized, supported and directed since 1944 by parents of the community. Here their youngsters learn under expert supervision to enjoy freedom without abusing it, to express themselves while respecting the needs of other children, to appreciate the beauties and creative possibilities of this miraculous world.

"Not bad," Lil said. "How do you do it?"

"Oh, old fashioned virtues," I replied.

Yes, it takes quite a few of them to build and maintain a school like this for ten years in a small Vermont village.

"You see," I said, sensing my opportunity, "In the city all your modern advantages are ready-made, run for you by professionals, and often priced beyond your pocketbook. Here nothing comes ready-made. The mothers and fathers of this town in building up this school for their children play a creative role as parents and citizens."

Back in 1944 a group of interested parents talked over reviving an old WPA playschool. A little stored equipment remained. Out of these discussions grew a summer playschool. Funds for a professional director were lacking, so a talented highschool senior was put in charge. The school board gave the use of the school playground and an adjoining room.

It was a modest beginning, but parents found their children profited. It helped, also, to ease their transition from home to grade school.

Emboldened, the committee asked the Plainfield PTA for support. A small but helpful yearly appropriation was voted, and Plainfield boasted the first PTA-sponsored nursery school in the United States.

Sessions are held in spring, summer and fall. Education students from nearby Goddard college staff the school under a full-time, trained director. School and college property are used until permanent quarters can be afforded.

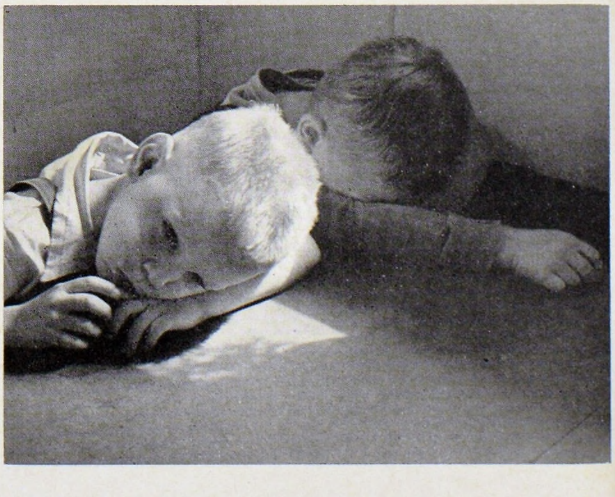
The active Pre-school group meets monthly to discuss child care and to plan fund-raising by typically ingenious small-town methods—auctions, catering at town functions, food sales, street parties and square dances. Local organizations contribute funds and materials regularly and local merchants give discounts on food, lumber and toys.

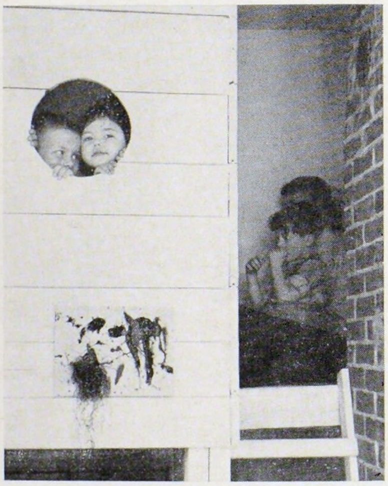
Annually the Pre-school group elects the Nursery School committee, which plans, hires teachers and shares headaches. Most parents of Nursery School children have served their strenuous tour of duty on this committee.

Something of what their devoted efforts accomplish, you the reader, may see on these pages. END

(Pictures continued on next pages)

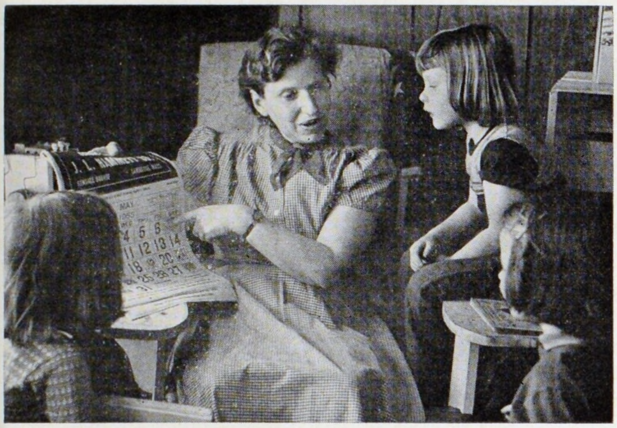
Nursery School is a children's world . . . a place where imagination and reality, frolicking sp



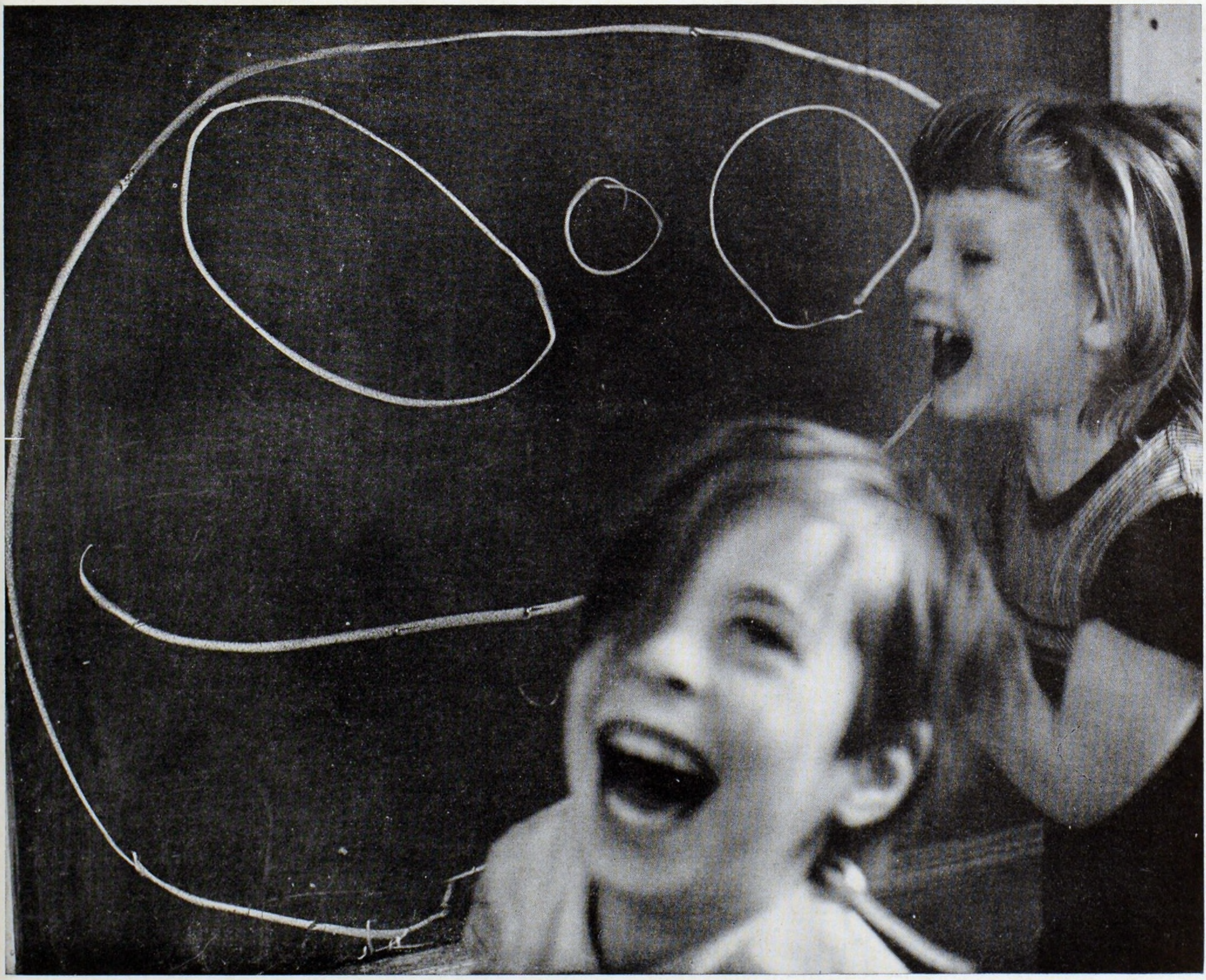


d gentle confidence . . .

. . . the meaning of friendship, music and games . . .



. . . learning and trying, and pure, free joy . . .



THE PHOTOGRAPHERS:

At sixteen Sonja Bullaty turned the family bathroom in Prague into a darkroom. At an even more tender age Angelo Lomeo tried fixing his first films with ordinary table salt. Both have come far since then.

Miss Bullaty's first pictures were good enough to appear in leading Czech magazines and after the War she was apprenticed to the foremost Czech photographer, Sudek. She came to this country in 1947.

Angelo Lomeo was a photomuralist for the N.Y.A. After war service he specialized as a professional in candid camera work.

As Mr. & Mrs. Lomeo they have won a reputation as photographers of paintings and art objects. For the past several years they have given as much time as possible to documentary photography.

Examples of the Lomeo's work have appeared in leading photography magazines. Vermont Life *is proud to be the first to present an example of their documentary work to a general audience.*

. . . bring children and teachers together

ced exploring and understanding of the world.

MT. SNOW SKIING

A big new Vermont ski area lives up to its name

By CAROLYN E. LONG

LAST SPRING, when the robins had returned to Vermont orchards, Mt. Snow, the newest ski area in Vermont, lived up to its name with nearly four feet of snow in one week and another foot and a half the following week end. This may have been a surprise to many, but not to Walter Schoenknecht, president of the Mt. Snow Corporation and discoverer of this favored spot. Walt, a native of New Haven, Connecticut, spent fifteen years touring the United States and Canada looking for a high mountain in a belt of maximum snowfall, near the large cities. He found it at Pisgah or Somerset Mountain, renamed Mt. Snow.

The main range of the Green Mountains to the west acts as a natural snowfence, spilling snow in unusual amounts on the eastern side where the miles of trails and slopes are now located. The name, Mt. Snow, is also appropriate in that Reuben Snow was the former owner of the farmhouse and land on the mountain bought by the Schoenknechts. The mountain is in West Dover, eight miles north of Wilmington, which is midway between Bennington and Brattleboro on the Molly Stark Trail. Boston is 125 miles away, and New York, 200, which to a skier is not at all too far for a week end's drive.

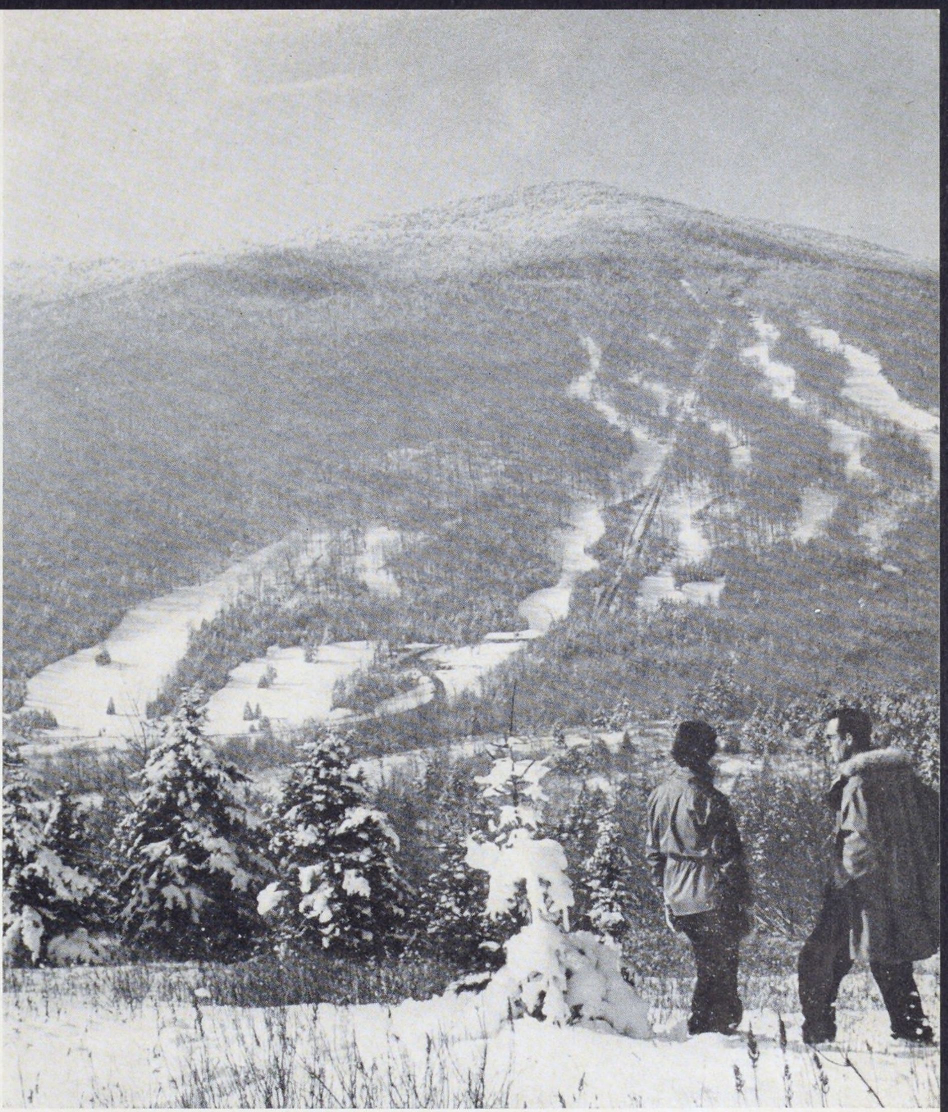
The change in the character of Mt. Snow was almost as rapid as its change of name. In February of 1954 it was a heavily wooded mountain, uninhabited, uncrossed even by paths. Its northeast side rose in a crescent shape to a rounded top at 3600 feet, from which few people had ever stood to look out on the spectacular view over four states. It now has a lodge at its base, tow houses along the routes of three chair lifts, and a shelter at the summit. Six wide trails and three open slopes wind

Priessman

Mountain run behind them, two skiers approach the big lodge near the base.

Mt. Snow lodge (right) *has huge, open fireplace, looks out on lift & trails.*

From across the valley, trails and slopes spread out on the eastern side of Mt. Snow. Since this view was taken another lift has been added, reaching to the 3600-ft. summit.



Priessman

down the center of the northeast face. Several parking lots capable of holding 2500 cars complete the transformation.

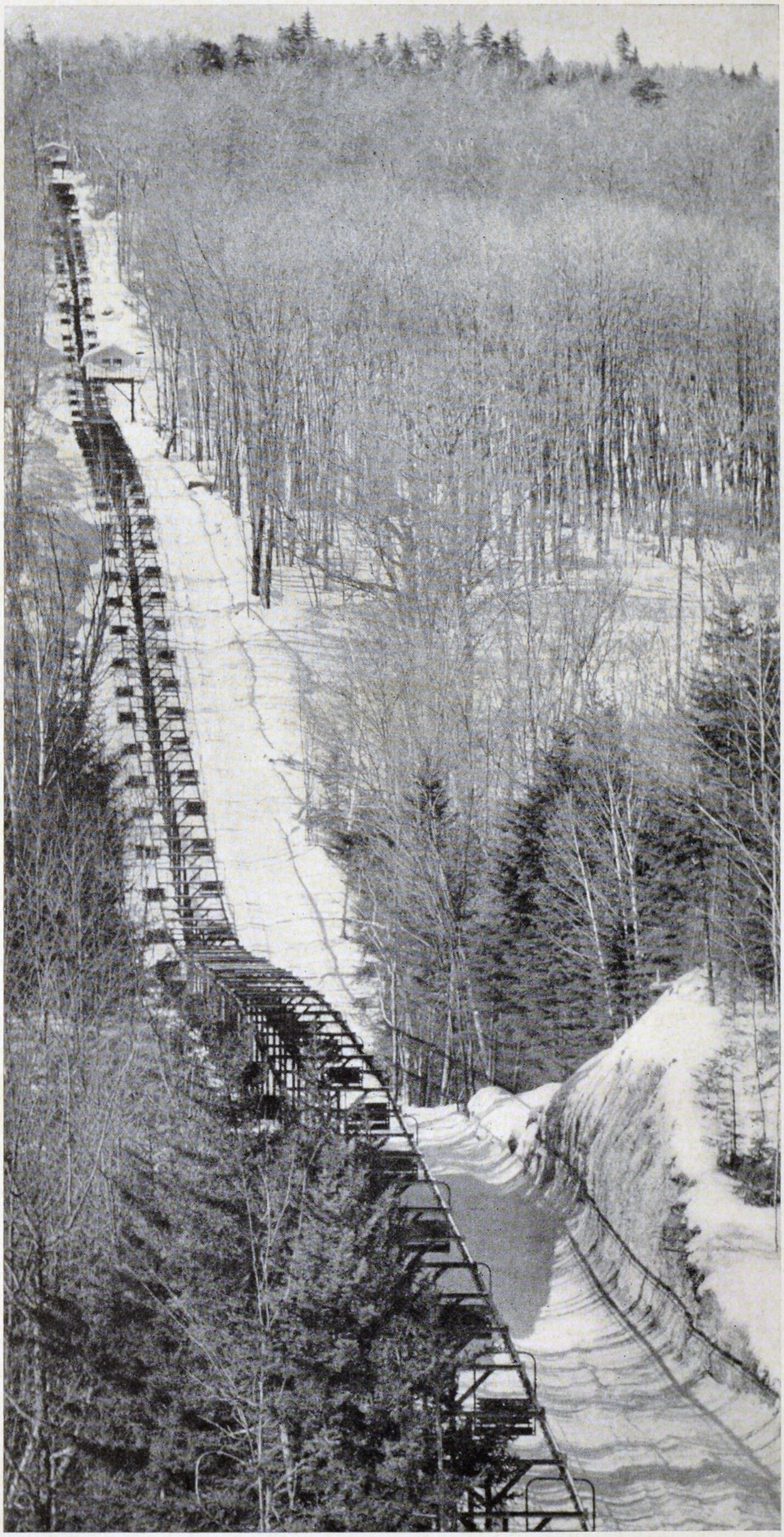
It was the energy and imagination of Walter Schoenknecht that made this transformation possible. Walt is thirty-six and a fine skier. He built and managed the successful Mohawk Ski Area in Connecticut for seven years before coming to Vermont. But always he had in mind an area with much more snow and space to expand. The Mohawk Area is not exactly small. It boasts ten different rope tows, ten trails and four slopes.

But Walt plans ten separate chair lifts for Mt. Snow and three complete areas. The central one is now completed. Next year Walt plans to develop a huge bowl to the south of the present trails and slopes. The bowl will offer one and a quarter mile runs of sunny, wind-free skiing on slopes four to five hundred feet wide. By the time the skiers who came to the area as beginners are ready for the real test of their skiing, another area will be ready to the north. Here in another natural snow bowl there will be trails with pitches of twenty-eight to thirty-four degrees. (For the benefit of the non-skier, a slope of thirty-four degrees means a drop-off which, without snow, would best be negotiated by means of a ladder.)

Orton

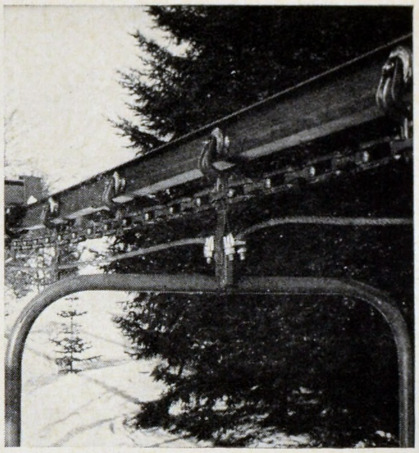
Starting work in March of 1954, Walt and a crew of men numbering eighty by fall, began cutting timber, bulldozing rocks, trees and earth to create what Walt calls "the most expensive trails in the world." The trails have sides higher than the center to hold the snow, built in rolls, mounds and jumps for easier as well as more exciting skiing. More than a mile of drainage pipe underlies the trails to prevent dangerous icy spots, while 150 tons of hay per year are packed on the trails for smoothness and erosion control. A thick growth of grass on all the trails also controls erosion. In contrast to the wide trails curving down the mountain, the lift lines cut straight through the trees.

To a skier these chair lifts are the biggest innovation at the area. Walt designed and had executed by the Link Belt Com-



Orton

Mt. Snow's unique lifts resemble giant caterpillars, generally follow ground contours but suspend riding skiers in double chairs. They give high capacity with low power.



Orton

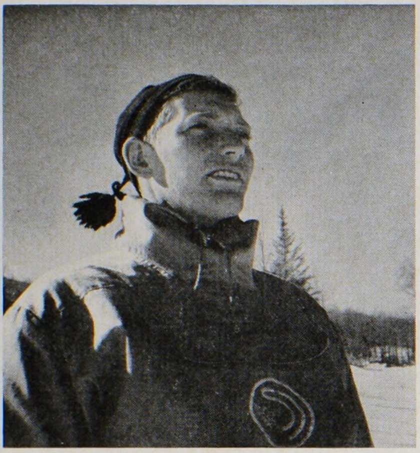
Detail of chair suspended from rail, pulled by continuous chain. Safety cable below.

pany a chair lift which is radically different from any other in the world. It carries nearly twice as many skiers per hour as conventional types. Each chair, seating two people, is suspended from a pair of wheels held in an overhead rail and propelled upward by a chain drive. In spite of its great capacity, the longest lift requires only a 150 horsepower motor. Simplified maintenance and safety are assured, since each chair is rarely more than a few feet off the ground. But Walt has no intention of leaving his invention in the "Model-T stage," as he calls it. Excessive noise and dripping from the rail were both overcome after the first year by special lubrication and aluminum canopies over the seats. Further improvements are expected to follow.

For the non-skier visiting the area, probably the most impressive thing is the huge, attractive lodge situated on a knoll near the base of the mountain. Its low lines and shallow pitched roof make it seem a natural part of the slope. "We tried to use as much native material as possible," explains Walt. He is particularly pleased with the warm-toned grey granite from the Rock of Ages Corporation in Barre. Hitherto thought too expensive for a building material, the granite is being used here on an experimental basis. An entirely new method of cleavage leaves a rough, pleasing exterior on the stone face. The twenty-two foot fireplace, open on three sides, and surrounded by benches, is made of 100 tons of this granite. Handmade brick salvaged from an old church in Halifax contrasts with the granite on interior walls. Forty-foot beams of native timber support the roof of the 150 foot structure.

The lodge was planned by a skier who knows what skiers want—huge picture

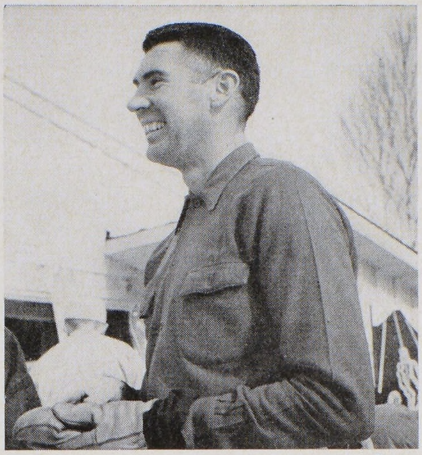
Mt. Snow Personalities


Orton

Orla Larsen is manager & ski school head.

Orton

Mt. Snow's self-appointed mascot.

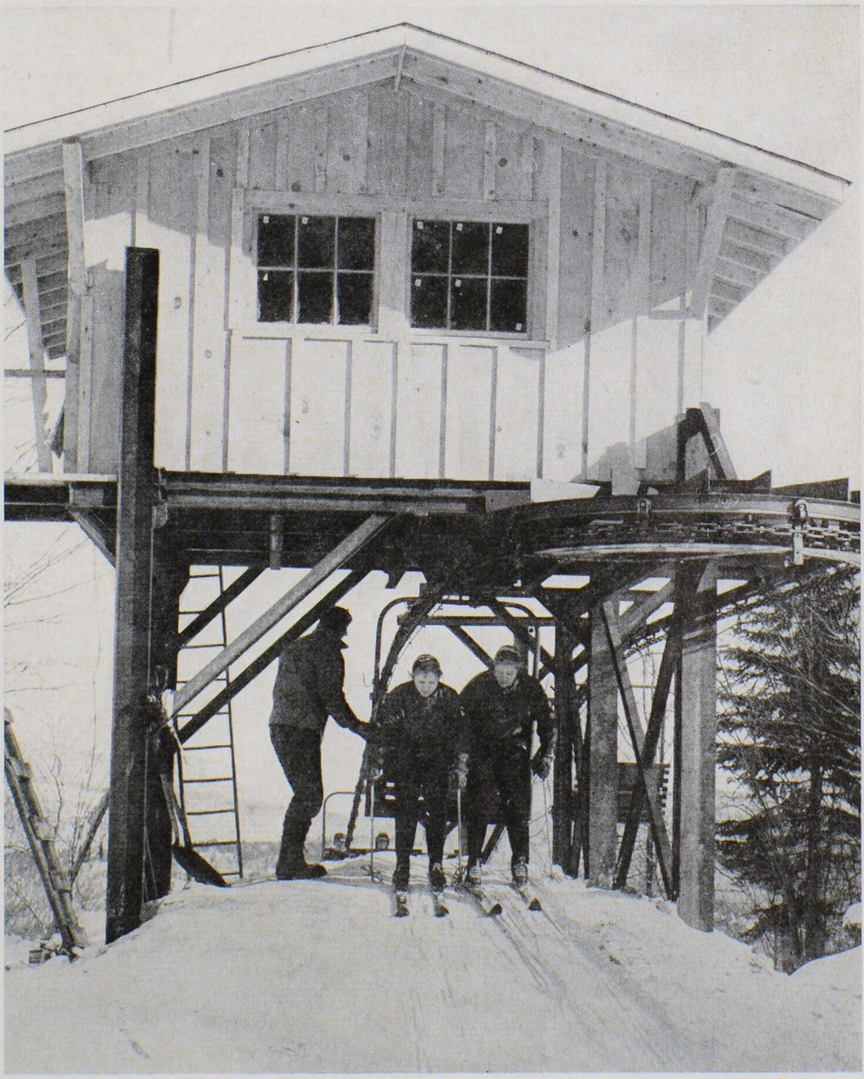

Orton

Walter Schoenknecht is the guiding genius.

windows overlooking the slopes, easy chairs in a semi-circular lounge, an efficient kitchen and food counter, long tables and benches for the luncheon break. The goldfish swimming in the lower level of a wall paneled in glass add an unusual touch to the decor. "I'd love to have parakeets in the upper section," says Walt. Goldfish and parakeets, however, do not mark the extent of Walt's unusual plans for the lodge.

In the next three or four years, the main hall will be increased to 350 feet, and two huge wings will be added to house a large ski shop, elaborate rest rooms, lockers, and storerooms. Another circular lounge will be added. Between the two lounges a V-shaped sun deck will be built, enclosed by twenty-five foot high glass walls but open to the sky. It will have radiant heated floors and a fifty-foot swimming pool heated for year round use.

By now, one may well ask how such a project has been financed. Appropriately, it is financed by skiers. Stock in the Mt. Snow corporation was offered for sale at $1000 per share beginning in April, 1954. Less than a year later the stock had doubled in value and almost all of the shares had been sold, the majority to skiers. With each share went a lifetime skiing right at Mt. Snow. Each of the five directors of the Mt. Snow Corporation is a skier. They are Walt and his invaluable wife, Peg, as treasurer; Winston Lauder of New York, who has bought a large house once owned by the Roosevelt family and has turned it into a fine lodge called Snowbrook; Frederick Lorenzen, a lawyer from New York and long time skiing friend of Walt's; and Littleton Long, a professor at the University of Vermont and formerly a president of the New Haven (Conn.) Ski Club.


Priessman

Two skiers dismount at the top of second lift. Motor in overhead building turns drive wheel at right. Empty chairs on continuous chain revolve and return down mountain.

Priessman

Skis, poles and mittens await their owners' return. Lodge and refreshment is nearby.

These people want an area where all skiers, juniors as well as seniors, beginners and experts, feel at home. A number of little "extras" suggest this thoughtfulness for the individual skier. If a skier's toes and nose begin to freeze, he can warm them at the giant warming radiator suspended at the foot of the main chair lift. On the ride up he is warmed by a big blue, hooded, football parka made of rubberized cloth to shed the snow. Skiers are whisked from parking lot to lodge on a free rope tow. The beginner is encouraged to learn by a lower daily rate on the novice chair lift. And skiers, especially skiing families, are encouraged to come during the week when special rates for lifts and lessons are in effect. A pet scheme of Walt's is free hot drinks for everyone on arrival at the top of the mountain. The summit warming hut to replace a temporary shelter must be finished before this can become a reality.

It took a lot of careful planning and backbreaking work to get the area ready, extras and all, for the first year's opening. The problem of personnel was important. After interviewing a great many people, Walt finally found his general manager and director of the ski school. He is Orla Larsen, a certified Canadian ski instructor and examiner, who seems as much at home straddling a steel beam to direct the lowering into place of a four-ton chain drive mechanism as he does on skis. Perhaps Orla's previous training as an airline pilot and racer makes him feel secure on top of the steel towers. Orla, on being asked how he acquired so much engineering knowledge, said, "I got some books and I sat down and studied *hard*." Orla has brought the system of the Canadian Ski Instructors Alliance to the area. It stresses that each skier learns to ski according to his ability and must be instructed accordingly. The school, staffed by sixteen instructors on weekends, has proved very popular and successful.

The Larsen family's contribution to the area does not end with Orla. His wife, Marge, takes in skiing guests in their newly built home and instructs on weekends. Other families work just as hard. Minor (Mitch) McLaughlin doubles as foreman and instructor, while his wife, Priscilla, serves as house mother for Snow Farm, the lodge run by the Schoenknechts.

Peg Schoenknecht, besides commuting each weekend from New Haven where seven year old Carol is in school, finds time to keep the financial records, carry on a good deal of the Corporation correspondence, paint signs for the area, and even to ski occasionally. Frank Smith, a former aircraft machinist and highly skilled carpenter from Connecticut, with army service in the ski troops behind him, manages the ski shop, while his wife, Marie, runs the big house in West Dover which they bought and converted into a lodge. Marie has two young boys to help occupy her time.

A former president of the Connecticut Ski Council, Andy King, is a bachelor and yet somehow manages to sell tickets at the area and run his Beaver Lodge at the same time. Taking over another former Roosevelt house in the spring of '54, Andy had to rebuild and renovate it completely. He just got under the wire for his New Year's opening. A week earlier men were still plastering, rebuilding the fireplace, putting in heating ducts, and painting. Guests who have visited him say, "We don't mind if Beaver Lodge isn't quite finished inside. We come back for Andy's cooking!" And so it goes with

Wide trails and smooth slopes are typical.

Orton

Orton

Broad beginners' slope runs directly from parking area, is served by own tow. Bottom chair lift lies just to left, lodge beyond that.

most of the new lodge owners. They don't mind hard work, and they love skiing. There were only four lodges the first year, but many new ones have been added for the second winter.

The success of the area has not depended entirely on these enthusiasts from outside of Vermont. Most of the workers at the area come from nearby and are wonderful to work with, according to Walt, because they are so handy at so many trades. Many of the local residents have converted attics and spare rooms for skiers so that by this winter there is room for at least 1400 skiers within ten miles of Mt. Snow. The Wilmington Ski Association has been formed to act as a placement service for all skiers.

The town of Dover, with a minimum of equipment at its disposal, does a heroic job of road plowing in an area where six-foot drifts are common. And the State of Vermont has contributed extensively to the towns of Dover and Wilmington in widening and hard surfacing roads leading into the area. Finally agreements had to be worked out with the National Forest Service to continue the area to the summit, since the top half of Mt. Snow is in the Green Mountain National Forest. The cooperation of all has made the area in two years one of the best in Vermont.

Already it seems a long time since a bleak day just before Christmas of 1954. On that day, the temperature was eight degrees above zero, the wind was blowing from the north at thirty miles per hour. There was plenty of snow for skiing, but only half of the chairs on the upper lift were installed. The last load of chairs had arrived by truck from North Adams, Mass., at 10:30 P.M. the evening before. Up at 6:00, the men began bolting on slats to the metal chair frames. They then bolted each chair on the overhead rail, working with bare fingers, since gloves were too clumsy. A jeep station wagon with chains on all four wheels ground up the slope to start the motor so that each chair, as it was mounted, could be moved up out of the way. Someone was doggedly trying to establish telephone communication with the top of the lift nearly three-quarters of a mile up the mountain. Inside the lodge, the coffee urns were just being set up. The ceiling insulation was not yet in place, and there was trouble with a smoky fireplace, where the giant hood hadn't yet been installed.

Yet on Christmas afternoon, the giant red and blue flags, the area colors, flew from the tall poles by the lodge, and the area was opened for its first skiers. "We should have opened a month earlier," says Walt, "but at that we had 115 days of consecutive skiing, through April 17th."

The adventurous spirit of these early years may not continue quite as it is now—one may not find the goldfish designed for the lodge temporarily swimming in one of the Schoenknecht bathtubs, as they did for several weeks the first winter—but it is hoped that, winter and summer, the area will always be a friendly, informal place for relaxation and fun. END

At the Sign of the Quill

BY *Arthur W. Peach*

Books, Cabbages and Kings, and Other Things

"THE atom age is now!" a headline shouts at me from the newspaper on my desk, and a page away are the names of volunteers ready to take a chance in a space ship headed for the moon. I note an advertisement of a brand-new "guaranteed" gadget you can shove in your ears if you live in a city and cannot sleep because of the city uproar. Another item refers to the fact, as a result of a scientific study, that about ninety tons of dust fall on a certain city each day of the year. I am told also that super-sonics this and super-sonics that have been "busted." And I scan some data showing that our cars and boats are being fitted with more and more powerful engines, and that deaths on highways and water are rising fast. Our highway engineers are straightening out some fine old Vermont curves and cutting down some lines of grand old elms and maples because some numbskulls drive so fast that they bump their thick skulls against them—and survive, most of them, to my disappointment—but the fine old trees and the curves that open on sudden vistas of beauty die. I skip the financial page of the newspaper but do catch a headline that says we have had fifteen years of inflation. Winding up my reading, I find a modern young poet concluding in a poem on the editorial page that there is no reason why man should ever have been and that he need not be at all.

The potpourri above is the result of letters coming to me which reflect states of mind ranging from fascinated approval of our day to bitterness and downright anger and exasperation against such a "way of life" as this modern one. I do not pretend to be wise enough to offer advice on any aspect of our "atomic age," but I think any sound philosophy of life recognizes the value of a Daily Problem—and I do not mean your husband or wife—for we need one daily annoyance at least to make life interesting. The two teen-agers who scorched around and away from me in a jalopy, the other day, on a main road, making my sedate and legal fifty miles an hour look old-fashioned, will escape, no doubt, any disaster and live to breed other scorchers of their kind, but they furnished a theme on which I could meditate for a few, otherwise, boring miles. Remember my old illustration, used before, of the Liverpool fish-dealer whose codfish seemed fresher and in better condition than the fish of his competitors; the reason—he kept a bullhead in the tank with the codfish. It pays to have a few spines and tacks around, and it would be a dull world without them. Also, some of you must recall the toy soldiers you played with; no matter how you knocked them around, they always swung upright in the end: they had lead in their feet. The symbol holds for man; he has been cuffed around for ages by every kind of natural and man-made catastrophes, but he comes up on his feet in the end.

The broad theme I have been sketching has a direct and vital relation to my native state. A letter from Virginia says that "I and my husband spent one year in Vermont, and we will never be satisfied until we return." There *is* a serenity of life among our hills and valleys, and the beauty of the state has had nation-wide acclaim; and Vermonters knowing its values in terms of a pure cash return and as a "way of life" will not see those values destroyed. Anyone can find in Vermont, by a simple search, plenty of places where the clamor and din dies away, where he can "possess his own soul" for a few weeks or for a lifetime. On the other hand, if any visitor is lost outside the noise of his own home city, he can find in the state bustling, busy communities where the "joints are jumping."

251 is Going Strong

I think I have ample proof for my observations above in the growth and experiences of the members of the 251 Club. For new readers of the magazine, I should explain that there are 246 organized towns and 5 unorganized towns, and I had suggested in an earlier Quill that one enjoyable way to know Vermont on a vacation basis or any other would be to visit every town. The plan has worked to such an extent that I cannot possibly cover developments in the space assigned to the *Quill*, but on July 27th in Montpelier the 251 Club had its first historic meeting—an informal gathering of fifty 251ers with Governor Johnson present, the Editor of VERMONT LIFE presiding at the dinner, and the Hon. Frank E. Hartwell of Bolton, a charter member of 251, showing color slides of his scenes he found in his roaming with Mrs. Hartwell over the state. Now rounding out his eighty years and more, he is proof that in these days when new roads beckon, the years don't count.

Those interested in 251 should remember that in winter Vermont is a brand-new state with scenes that rival any summer scene in terms of fresh beauty and inspiring landscapes; and thanks to a fine highway patrol system, driving in the winter from one end of the state to the other, barring abnormal storm conditions, is as safe as in the summer—and safer to some extent because the speedsters have, for the most part, departed. The doubtful should remember that our farmers and village folks have cars and use them through the winter, and the percentage of accidents among them is close to nil. The mountains and their winter charm should not be the property of the skiers alone. As for the 251 Club, if you are interested, just send a card to me, care of *Vermont Life*, and you will get a map of our towns, a highway map, a statement covering the 251 idea, and a copy of *The Wayfarer*, the informal organ of the Club.

Vermont Sayings and Scenes

Let me switch back once more to the theme I have been using. Pictures as a rule do not fib, and I have been looking at 43 pictures of Vermont scenes and people, and all of them reflect the serenity, the quiet beauty, and the hill and valley wisdom and wit of the dwellers therein. Keith Jennison, who compiled the popular *Vermont Is Where You Find It*, now has gathered new pictures and sayings from various corners of the state; and in 90 pages of his recent book[1] you have

CAMEL'S HUMP FROM HUNTINGTON *By* WARREN CASE, *Courtesy* THE LANE PRESS

glimpses of a real part of Vermont—not all, of course; he tends to select photographs of our older people and rural scenes—leaving out the industrial phase entirely for someone else to do. But the book is entertaining, and as I say, suggestive of what lies at the real heart of the state. It is not nostalgic or sentimental. For instance, you see a wide sweep of a lovely valley and the text on the opposite page reads: "What a beautiful view that is!" You turn the page, and on the right you see a haying scene, and this text: "Maybe, but if you had to plow that view, harrow it, cultivate it, hoe it, mow it, fence it, and pay taxes on it." You turn a page, see the craggy, unfathomable face of one of our farmers and his final comment: "It would look pretty durned ornery." Mr. Jennison, a New York editor, has scrambled his agriculture a bit, but his point holds. He has given credit for his pictures, but does not mention the sources of his stories as he might. One he uses I know I heard fifty years ago. On the whole, however, the pictures and the text have a fresh flavor, and he has a book that Vermonters and non-Vermonters will enjoy.

Other Books

Mary Wolfe Thompson of Arlington has written an appealing book[2] whose theme has to do with Ginger and her brother, Hal, a crippled GI veteran, and their escape from a city environment to the Vermont hills. She is the chief plotter in a scheme which brings them to an old Vermont home which they repair and which starts Hal on an interesting adventure as an architect who finds profit, pleasure, and health in rescuing old places. It is not all easy for Ginger and Hal, and the story, planned for young people and teen-agers, has real suspense and excellent characterization.

These days, walking down a street I cannot tell daughter from mother or mother from grandmother. Mrs. Lillian Loveland, at the age of seventy-six, had the courage to travel around the world on a freighter, and she tells the story of her adventure in a book of 198 pages.[3] It is pretty good proof that "where's there's a will there's a way" is an adage still functioning in the "atom age." . . . In answer to correspondents who ask for a real "Vermont" book of recipes based on maple sugar or maple syrup, an expert tells me to recommend this one—*Vermont Maple Recipes*,[4] by Mary Pearl, 87 pages, with delightful decorations in black and white by Edward Sanborn. Try a bookstore, and then if you have no luck, write the author, Mary Pearl, Burlington, Vt.

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1. GREEN MOUNTAINS AND ROCK RIBS. By Keith Warren Jennison. Harcourt, Brace and Company, New York. 1954. $3. 2. GREEN THRESHOLD. By Mary Wolfe Thompson. Longmans, Green and Company. New York, 1954. $2.50. 3. AROUND THE WORLD ON A FREIGHTER AT 76. By Lillian Steel Loveland. Exposition Press. New York. 1954. $3. 4. VERMONT MAPLE RECIPES. By Mary Pearl. 1952. $1. END

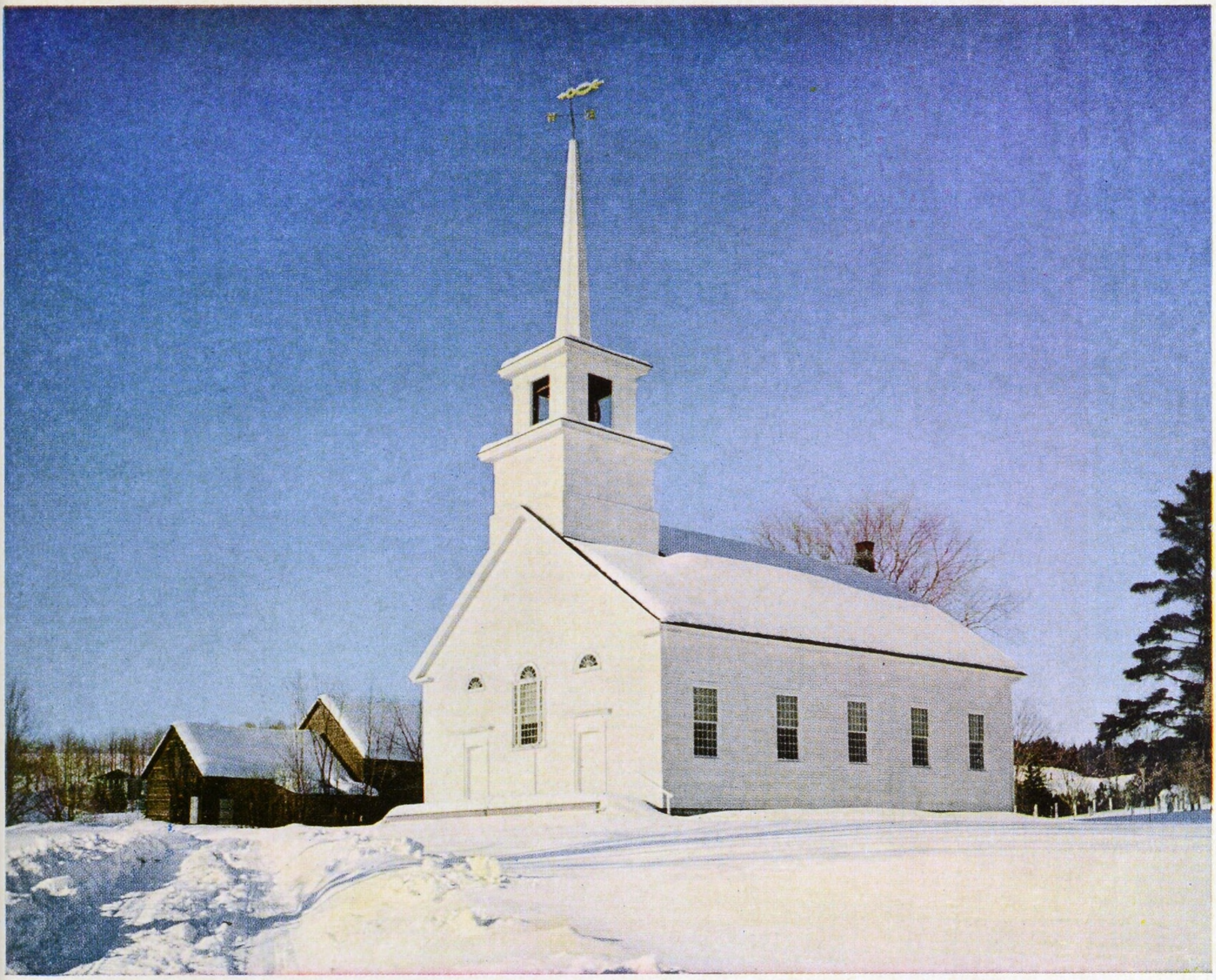
THESE MANY MANSIONS

A QUARTER-CENTURY OF VERMONT CHURCHES

A PICTURE SELECTION

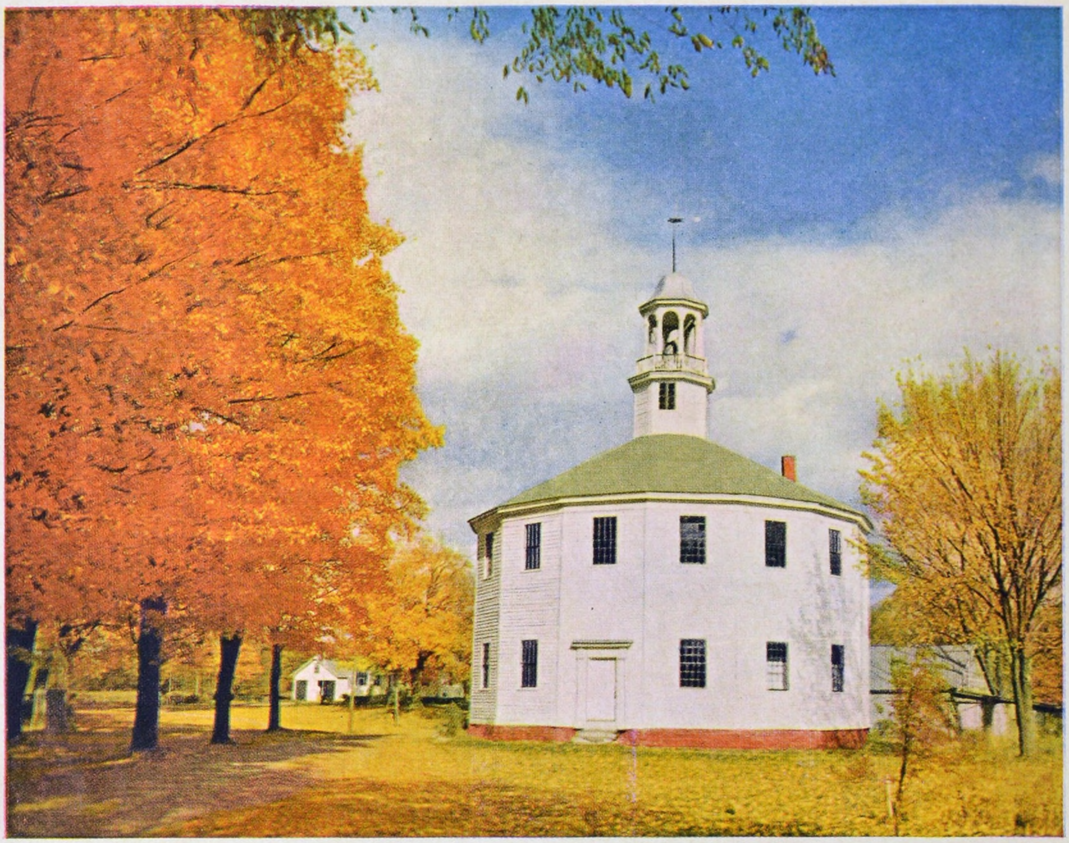
By Robert P. Holland

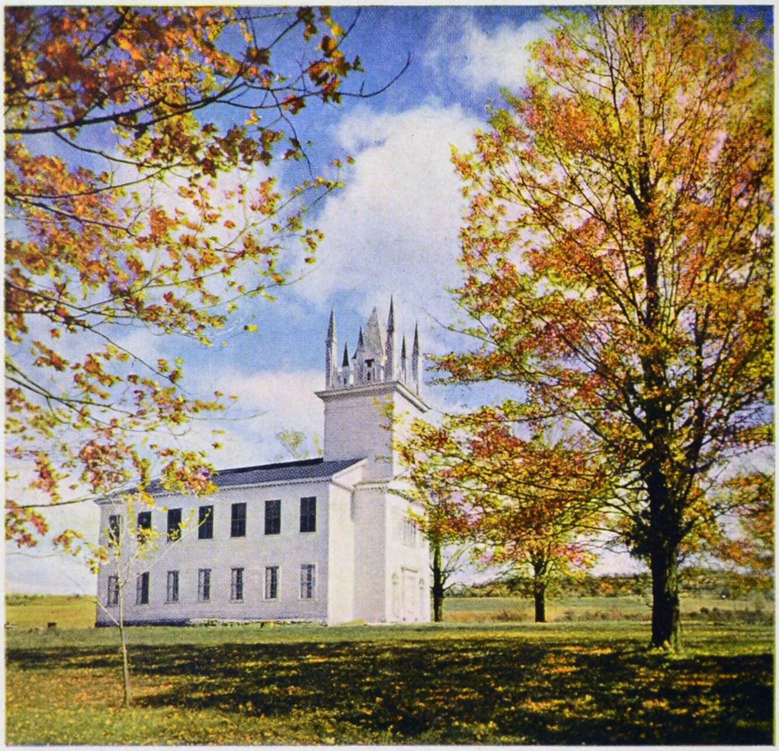
With notes by
Herbert Wheaton Congdon
Author of "Old Vermont Houses"



BURLINGTON UNITARIAN (left): A stately Meeting House, built of brick, designed by Peter Banner of Boston, it has stood since 1816 at the head of busy Church street. The perfect proportions of tower and steeple, the serenity of its design, are noteworthy.

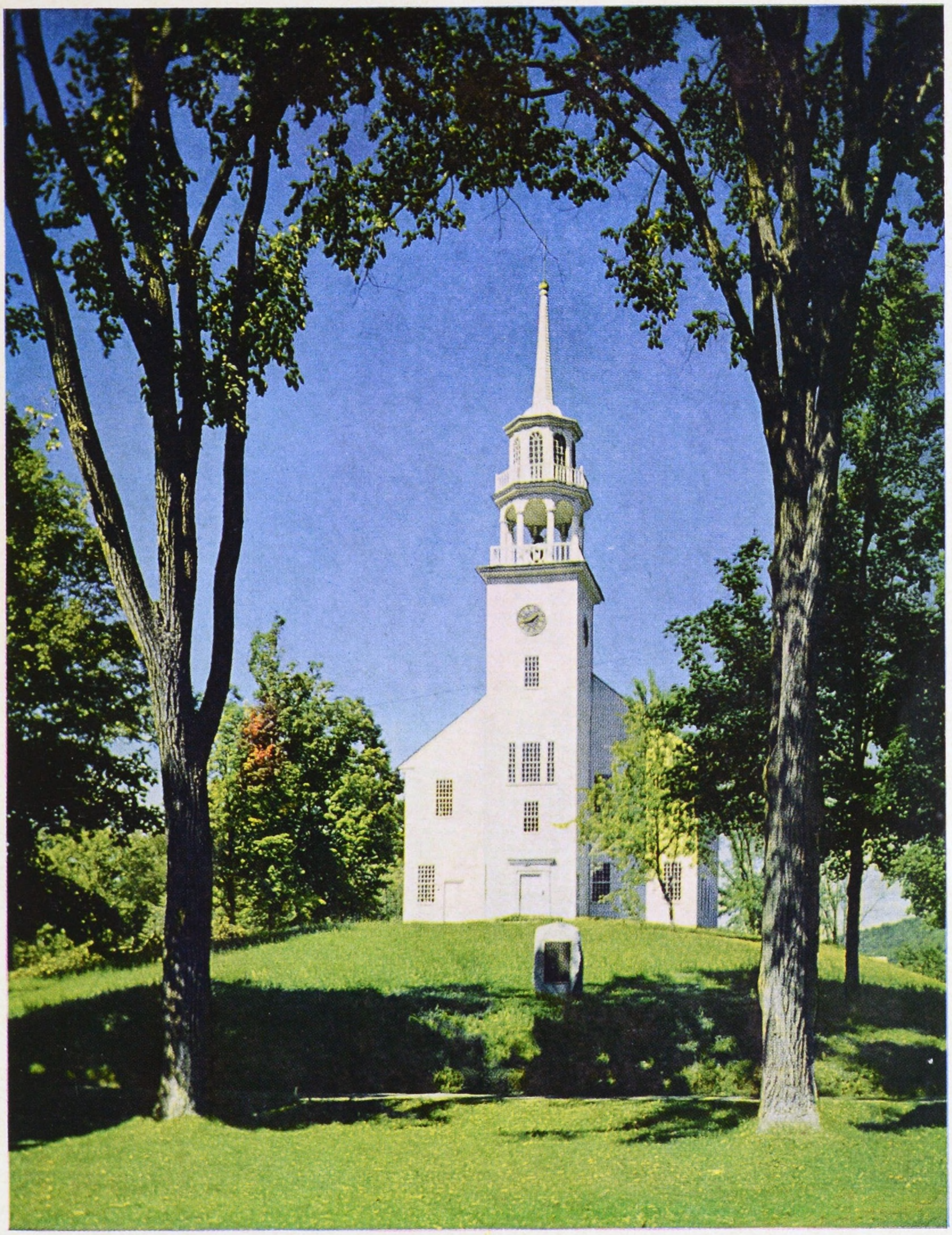
BURKE HOLLOW: Built in 1825, one of the early union Meeting Houses, four religious bodies shared it, one each week. The exterior has obvious nostalgic charm, but the interior has a unique barrel pulpit with a lovely choir gallery above and behind it.





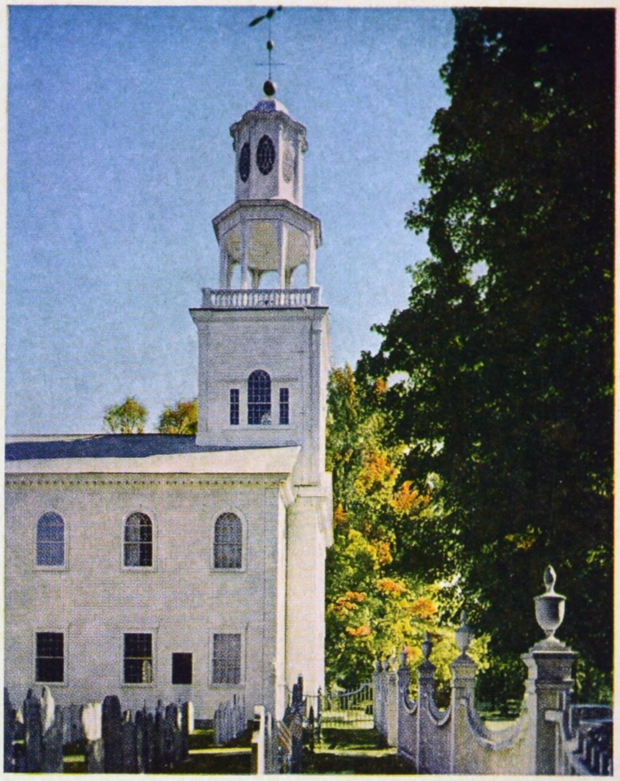
RICHMOND ROUND CHURCH: Said to have been copied from a round church in New Hampshire, the plan is sixteen-sided, with entrance doors on three of the cardinal sides, the fourth being occupied by the pulpit. It was built in 1812, the joint effort of five sects, their use of it for worship being apportioned according to their numerical strength. From the beginning it was used also as Town Hall. Today, there is only an annual service of worship. The crowning steeple with its columned and domed cupola and ancient weathervane, is of interest.

SUDBURY: Built in 1807 and later granted joint use by town and the Congregational services, the exterior shows in its design the lingering tradition of "Gothick" detail of Old England's churches. The former galleries have now been replaced by a floor, the Town Hall being on the ground floor and the religious services held upstairs.

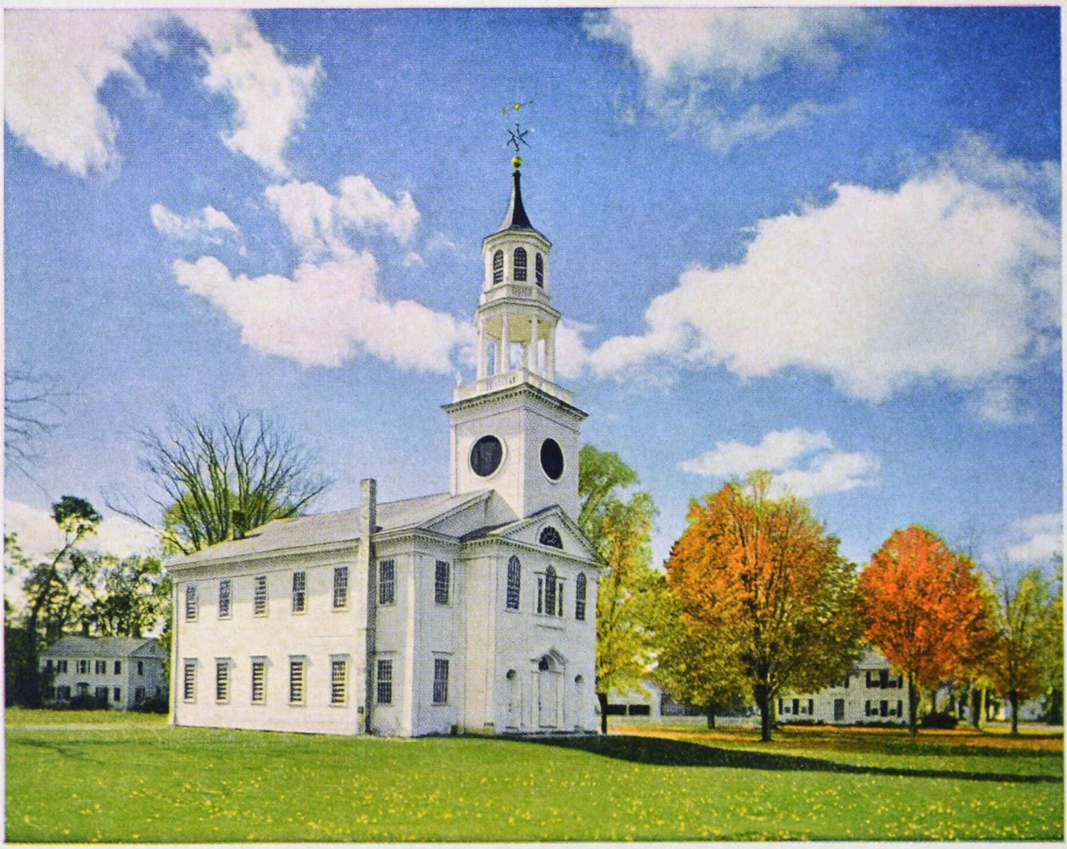


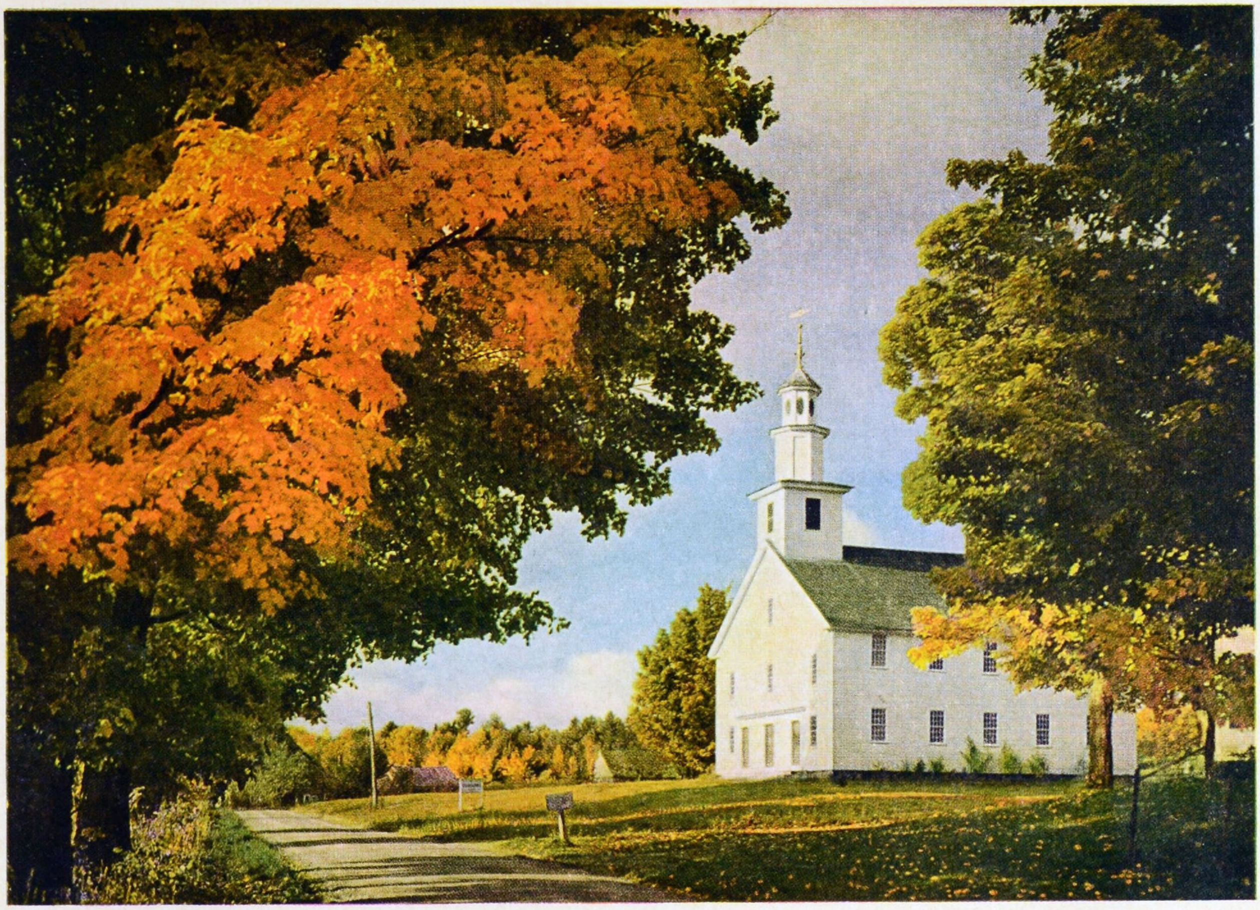
STRAFFORD: Notable for its splendid hill setting and its matchless tower and steeple, like most of the old Meeting Houses it has had the dual use of Town and Religious Society since it was built in 1800, although today the town has taken over its upkeep.

OLD BENNINGTON: One of Vermont's most beautiful Meeting Houses in setting and appearance. It was built by the famous architect, Lavius Fillmore in 1805 and skillfully restored to its original interior appearance in 1937. Tower and steeple are noteworthy both in proportion and detail. The interior shares with Middlebury's Meeting House Fillmore's placing of a flat dome embraced by a cross-shaped ceiling, "the Cross of Christ embracing the World."



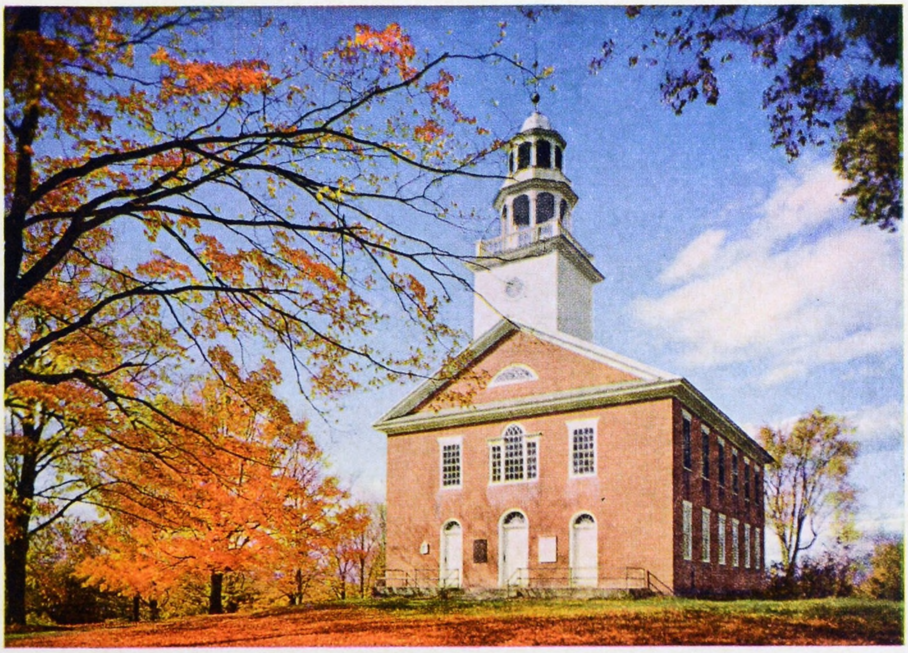
EAST POULTNEY: Set in the middle of a little Green, this lovely Meeting House was designed and built by Elijah Scott in 1805. His skill and good taste show in the perfect proportions and the excellent decorative details of the exterior. It is unfortunate that in modern times the necessary chimney for a heating plant was so clumsily placed, suggesting a lack of ingenuity as well as good taste. The columned top of the steeple, storm wrecked, has been skillfully rebuilt, however.





CALAIS: Old West Meeting House was built by and for the members of a scattered farming community in 1823. It has now been repaired and endowed by a descendant of one of the families that no doubt worked on the building. It's plainness and sincerity are very convincing.

WEATHERSFIELD CENTER: The Center is a name rather than a village yet here stands one of Vermont's few brick meeting houses, a beautiful building, its old, rosy bricks and well-designed façade facing the Common. It has a good Palladian window and a notable steeple terminating in a two-decked, domed cupola. It was built in 1821 and remodeled as was the Sudbury church in 1861. Summer services are held.



Deacon's Boy

By James David Frye

Sunday was The Sabbath *in the Seventies*

Ours was such a pious family that I still haven't figured out why I didn't wind up a lifetime deacon like certain Frye ancestors and near male relatives.

Not a meal was eaten, until Pa had said a simple, sincere grace. No prayer meeting was held at the local Free Will Baptist Church without words from him. Not a Sabbath came to the township of Concord but, rigged in a farmer's Sunday best, he took down the discarded stovepipe hat my Uncle James—his dandy of a brother in Boston—had sent up-country, preparatory to going to worship with his family.

Pa was now nearly ready for services in the church of which he became Deacon Albert Frye at nineteen and of which he was still Deacon Frye at eighty-six. First, though, he must fondly circle the silk hat's crown with his elbow, bringing out its sheen; when, satisfied that the nap lay just so, he carefully affixed it to his head and swung out to the team waiting in our yard.

Down narrow back roads, their shelving banks sometimes gay with goldenrod, or, again, glittering with snow; sometimes thick with wild raspberries, his pair jogged along toward the section known roundabout as "Texas."

Texas came by its name at the peak of Greeley Go-West frenzy. A young blood made his brags that he was off for Texas—yup! out there you didn't need no sidehill plows. Instead, he quietly settled down to rugged Vermont farming a few ridges beneath Concord Corner, and the little farm colony became *Texas*, answering to that jibe to this day.

Like Pa, I went regularly to church, even as a small boy, to sit bemused through long, sonorous sermons, my mind sometimes wandering to the meal that would come afterward.

Maybe a chunky oven roast of beef, its accompanying "potato thump" a creamy mound redolent of whipped-in onion shreds; fat dill pickles and crusty homemade bread; mugs of rich milk; a huge yellowed nappy chockablock with Indian

pudding, at the making of which mother excelled. If not thinking of food, I would be eagerly waiting for a hymn to be announced, so I could get some of the suppressed wiggle out of me.

Mother, on the other hand—as she grew weaker with old-fashioned consumption—had given up attending service somewhat before my fifth birthday. So, one summer Sabbath, when Pa's corn in all its ripe, murmurous green rippled in the wind, it was she who spied our cattle loose among the fruited stalks.

When she tried shooing them back to pasture, the cows obstinately refused to forego their feast. It took much running around, before she had our bossies behind bars again. Thus, she was left not only sadly winded, but also all puckered up.

Pa came home from Texas to find mother agitatedly waiting for him.

"Have a good sermon?" she asked at once.

"Splendid," said Pa, turning over the horses for my brother Solon to unhitch.

"Felt The Lord was with ye all through, I suppose?"

"Oh, yes! The Lord *was* with us," Pa averred.

"Well, He must have been!" snapped mother," for The Devil himself was right here in the corn with your cattle, most the time."

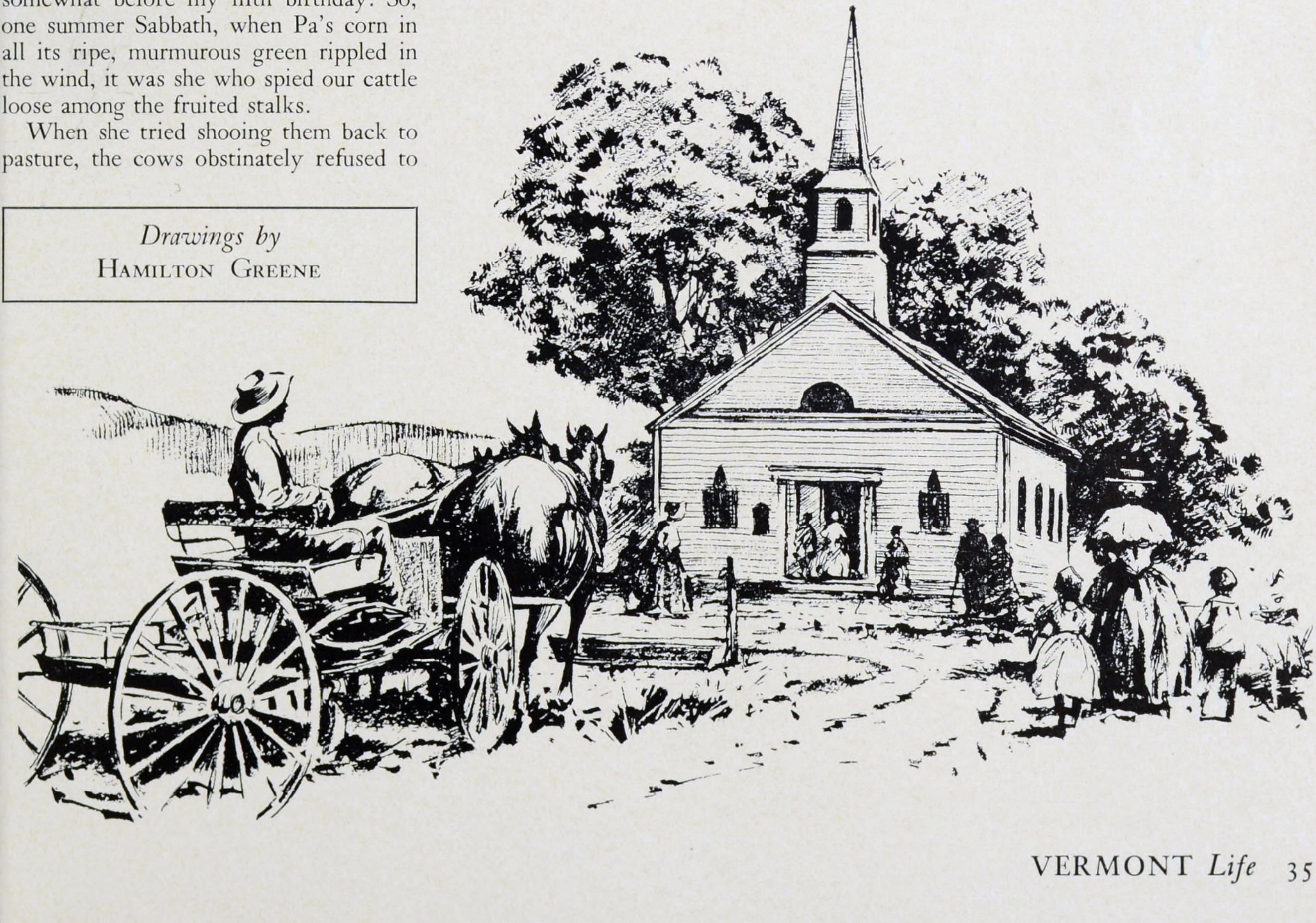
In warm weather, though his father held church office, young Jamie Frye might—and at times did—attend services unabashed by his shoeless feet. But Pa compensated for this informality by appearing in Uncle James' cast-off silk hats. Some of these were also sent on to a younger brother, my gentle Uncle David Frye, likewise deacon of Texas Church from young manhood to death.

Our meeting house had been reverently constructed by heavy timber men, farm carpenters, self-taught and expert at handling eight-by-eights or six-by-eights. Expert, too, at shaping the cannily mortised hand-hewn beams; the sturdy sills and plates; the round wooden pegs, seemingly the size of a half dollar, needed for such a structure. I could consider myself all but related to that church. A father and an uncle, deacons there; an uncle by marriage (on Mother's side) the builder—for Uncle John Temple had supervised its erection. (A master-hand, he was too, at the rearing of capacious cattle barns; rainbow arch covered bridges; or anything requiring heavy timber, like the high spans of trestle for the newly-come steam cars slowly working their way North.)

At services in this church, we used a thick, narrow Free Will Baptist hymn book with raised design on the cover. The hymnal, containing 1,200 songs of solemn praise and worship, had been published in 1853. But we sang some of the modern hymns as well.

My only musical accomplishment was to blow a popple whistle. Nor could I have told if Robert E. Lee or Robert Lowry wrote the evangelical favorite with lingering refrain, "I need Thee every hour." I could, however, have repeated it word for word. I knew by

Drawings by
Hamilton Greene



heart any amount of sacred songs, memorized from hearing them sung time and again by members of my god-fearing family, or the all-neighborhood choir of our church.

The choir was led by Frank Wallace, a tall farmer with resounding voice and a sense of pitch. It thrilled me to hear him give forth with, "Roll, Jordan-ro-oh-oll!" I could almost glimpse the waves rolling past Jordan's shores, as Farmer Wallace's deep notes drifted up to the high beams. Perhaps that was what it meant in the hymn adjuring us to "sound the high celestial strain."

He had no organ. Not even a hard-pedalled parlor affair embellished the singing. His choir was composed completely of untrained members from farm families. Everything depended on a sensitive little two-pronged tuning fork he carried in his upper waistcoat pocket.

An awe-inspiring hymn would be given out—

O, tell of His might and sing of His grace,
Whose robe is the light, Whose canopy, space—

Or one dealing with nature, understandable even to a small worshipper.—

O, fire and vapor, hail and snow,
Ye servants of His will.
O, stormy winds that only blow
His mandates to fulfill;
Mountains and rocks that rise to heaven,
Fair cedars of the wood . . .

Through the plain lights of our high church windows, on a January morning, I could see "fair cedars of the wood" standing out darkly against snow-covered slopes that dropped to the Connecticut River below us. I could see, too, great sword-like icicles—result of a recent thaw—hanging jaggedly from the jets and glinting in the sun.

Mr. Wallace in proper Sabbath attire, rose solemnly. The other singers, including my sisters Caroline Sabina and Maryann Adeline, rose in unsion. They stood in a small loft at the side of the ministerial platform, where a mammoth Bible lay spread wide on the reading desk. Commandingly, the choir leader tapped his fork against the rail before him. At times, he even thrust it into his mouth and bit it.

A chill morsel, I used to think on some sub-zero day.

For the merest second, he listened to its message—unheard by us sitting beneath—as it hummed along the tines. Suddenly, a cue for the singers, there came those first booming notes from his strong throat. With relief, all younger churchgoers joined in. For us small fry, singing was a blessed break in the Sunday proceedings.

Possibly for older members of the congregation, also. It gave everyone an opportunity to get off hard, uncushioned, board seats. Being a worshipper in a country community was a rough and ready deal in the 1870s.

Not all my hymn-singing brought me blissful comfort. Well do I recall applying to my unregenerate twelve-year-old self certain verses I sang with real trepidation for the future.

Though my face were bathed in tears,
That would not allay my fears,
Would not change the sin of years,
Weeping will not save you.

Nope, at this late date, weeping was useless. Besides I hated to shed the tiniest tear—humiliating. I must assume the burden of my transgressions, willy nilly. Cynical at twelve, I felt others also applied some hymns personally—but in a romantic way.

A country lass, sweet on the gangling swain who was courting her up at sessions of Matt Morton's singing school could safely wear her heart on her Merino wool sleeve right in church while singing—

I need Thee every hour,
In joy or pain,
Come quickly and abide,
Or life is vain.

And there was the summer a handsome city boarder at the Darling farm—name of Ransom—had every girl's heart fluttering two-forty tail over the dasher. I instinctively knew that homebody or hop-picker, each added a capital "R," whenever she sang, "with all our *Ransomed* powers."

An unmentioned function of the hymn-singing was to stir the congregation's blood a little by this exercise. The building we occupied was warmed merely by a pair of large box stoves fed with chunk wood cut by parishioners, then stacked high near the church. These stoves had been set at the right and left of two entrance doors at the very back of the room, so members heroically sitting in front pews—together with pastor and singers—got only a thimbleful of heat.

Actually better off were the horses of families who drove to Texas Church. Being a small congregation, we had no sheds, so Rice Whipple threw open his big barn, 30 rods or so below, for their shelter. Along with other pairs, all warmly stabled, Pa's blanketed team stood, hitched to our high-backed old Comfort sleigh, a relic of Frye migration from Royalston, Massachusetts.

Because I was parcelled out to relatives after my mother's death, I attended other churches, and most of these did have long horse sheds at the rear, frigid enough in mid-winter, with one side open to all the winds that blew! Sometimes, as I sat in these churches (my ears attentive for any diversion from sermon-following), I'd realize that the tethered animals felt the cold, in freezing weather, and were pulling at halter ropes or stomping their feet. For in addition to occasional whinnies from the stalls, a faint tinkle of quivering sleigh bells could be heard.

A horseshed might be center for quite un-Sabbath activity. Once the sermon ended, certain pillars of the church made haste to reach it before farmers from the more remote hills had backed out their pungs and travois sleds, asking in discreetly low voice, "Got any yearlings to sell? Any pigs coming along?"

Many a horse trade, satisfactory to one party, at least, was fixed up amidst the after-church bustle, which I found very pleasant. Women tucking themselves under heavy lap robes. Children scrambling for a favored seat. Horse blankets being unbuckled and flung behind dashers. And several drivers eager to be off, all at the same time turning their runners towards home, without ever a collision between inter-weaving sleighs.

As deacons of Texas Church, Pa or Uncle David handled the beautifully burnished pewter communion cup, now one of my treasures. As befitted a deacon's daughters, my sisters Sabiny and Maryann were bound to join the church in an outdoor ceremony. When the time for this arrived, Maryann was married to Charles Keneson and her young husband decided to join with her.

Barefooted—the event was always in warm weather—I wandered down to the little dammed-up pool by Rice Whipple's sawmill on the appointed day. To this, baptismal candidates came in their designated garb. Minister Butler, who performed the ceremony, was a small man. He had no trouble in dipping tiny Sabiny, though she was rather plump. Nor slender Marryann, not letting a strand of the long brown hair on which she could sit with ease become moistened. But Charles, a robust six-footer, proved to be another matter. As he bent Charles back, back for immersion in cool pond water, our pastor lost his grip.

There was a gurgle, some hurried floundering, then Charles, sputtering, regained his foothold.

Almost instantly, choir singers, stationed on the bank felt moved to burst into a song of thanksgiving, which I considered most timely. My brother-in-law, though himself a chorister, was too waterlogged to rejoice with them.

Those old songs of worship ranged from fearsome to consoling. Often and often, have I heard the country folks taking comfort from some favorite hymn hummed softly to themselves. Our mole-blind fiddler at "The Corner," who bowed away for kitchen junkets. My arthritic

Great-aunt Nancy, childless and a widow. The Civil War veteran who lost his leg at the Battle of The Wilderness. Sister Sabiny, made motherless, when barely twelve.

All singing of a land fairer than even the green hills of their loved Vermont.

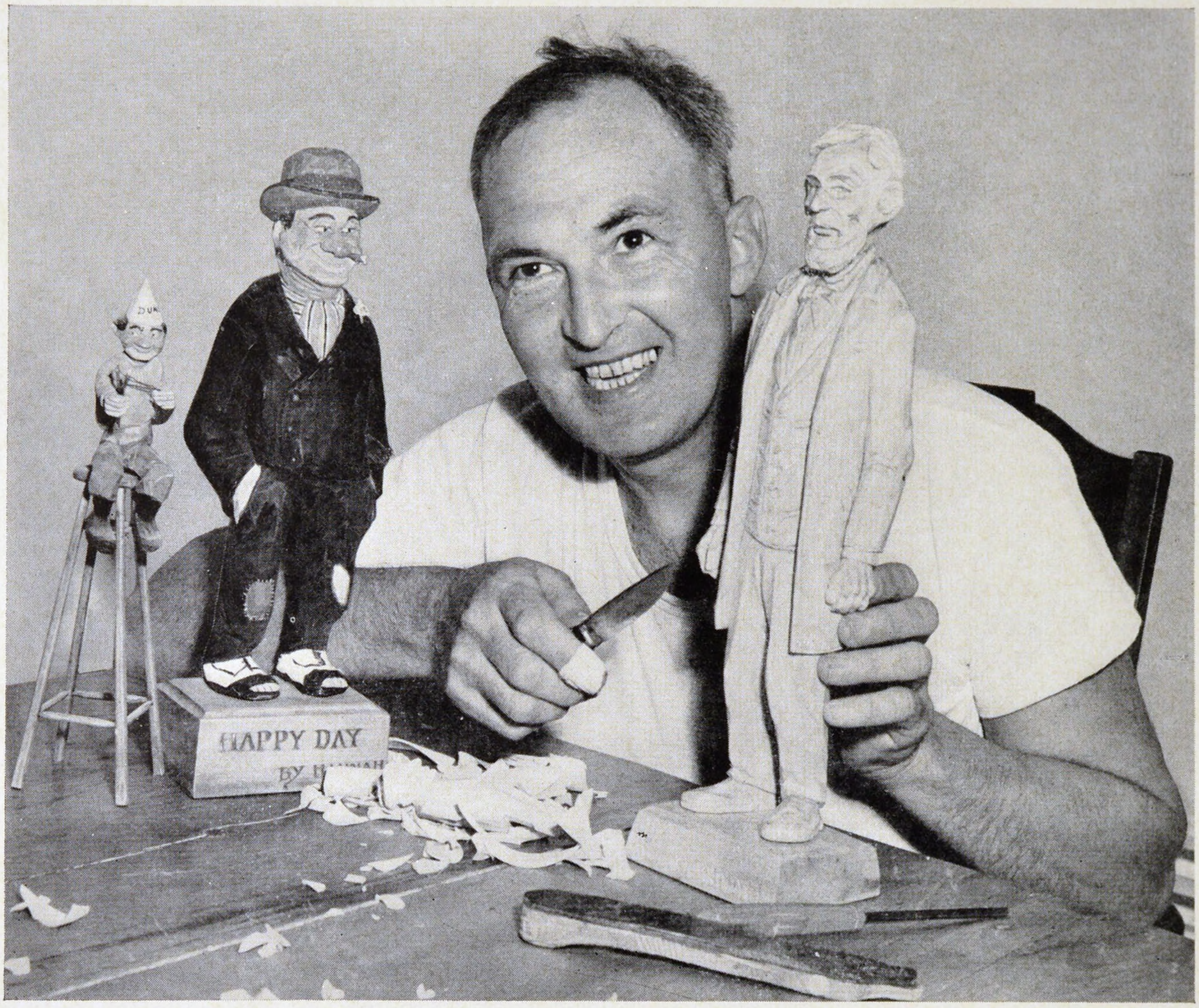
> "*O, happy land, O, distant land,*
> *When can I view thy glorious band?*

The voices of the singers come waveringly back—but how firm and enduring their faith!

> "*No night is there, nor clouded sun,*
> *But sacred, high, eternal noon.*"

Yes, the old church songs dealt with every emotion. And like as not, nowadays, this onetime deacon's boy—himself turned eighty-seven—tries to sing snatches of them, while his thoughts wander to the past. To times when a small barefoot churchgoer sat close to his Pa—made unnaturally tall by an imposing city top hat—as he drove his team down peaceful country roads to a peaceful country service. END

HANNAH-THE WHITTLER



He could do his whittling anywhere, but Gerald Hannah and his family like Vermont best.

Told & Pictures by ALDO MERUSI

GERALD HANNAH OF NORTH POULTNEY is one of the few persons in Vermont who is whittling his life away. He has been making a living out of carving figures out of wood for 19 years. It all began as a hobby.

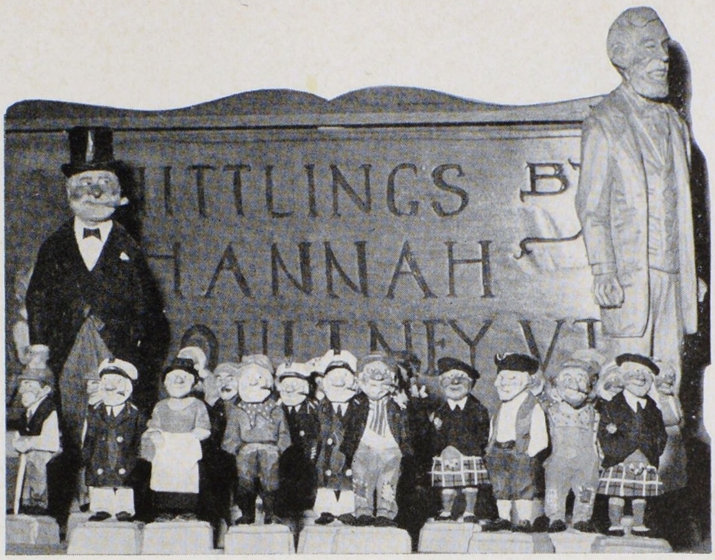
The market for hand-made figures is so great that he has started several handicapped persons in the carving business, all of whom are making a good living at it now.

Hannah could shave with the keen edge of the knife he uses on his basswood figures. Although he has some half dozen tools lined up on the window sill of the studio at the back of his home, he says he could make all of his figures with the knife and a small gouging tool.

It is his goal to someday conduct his business himself, rather than to depend on an agent, and to have a studio where the public can watch his figures being made. Besides selling his wares, he would like to teach classes in carving.

Although Hannah says his business, carving everything from Negro parson to Green Mountain Boys, is "just another

Duncan, 10, sometimes tries his hand at carving. His sister, Norma, 16, paints figures for her father occasionally on a business basis, he says.



An assortment of Hannah's most appealing figures (upper right) *assembled at Eastern States Exposition, where he displays his craftsmanship yearly.*

way of eating," he admits he would get a kick out of doing it if he never sold anything.

That situation is not likely to arise, since he never catches up with orders from his agent, and makes a living for himself, his wife and four young Hannahs ranging in age from ten to 18.

The idea of Hannah's figures is simplicity—"just plain American characters"—he describes them. The figures, on the mantle shelf in his studio, include a hobo cooking over a tiny fire, two checker players bent over a board, a dunce on a stool, an Indian hunter with a game animal slung over his back, a Scotsman in kilts.

A large percentage of his characters are male, since the only time the public seems to demand women is when they buy a pair of figures. Hannah works out a weekly quota, which he turns out at hours which meet his convenience. His choice is Vermont basswood, which he obtains from Hubbardton.

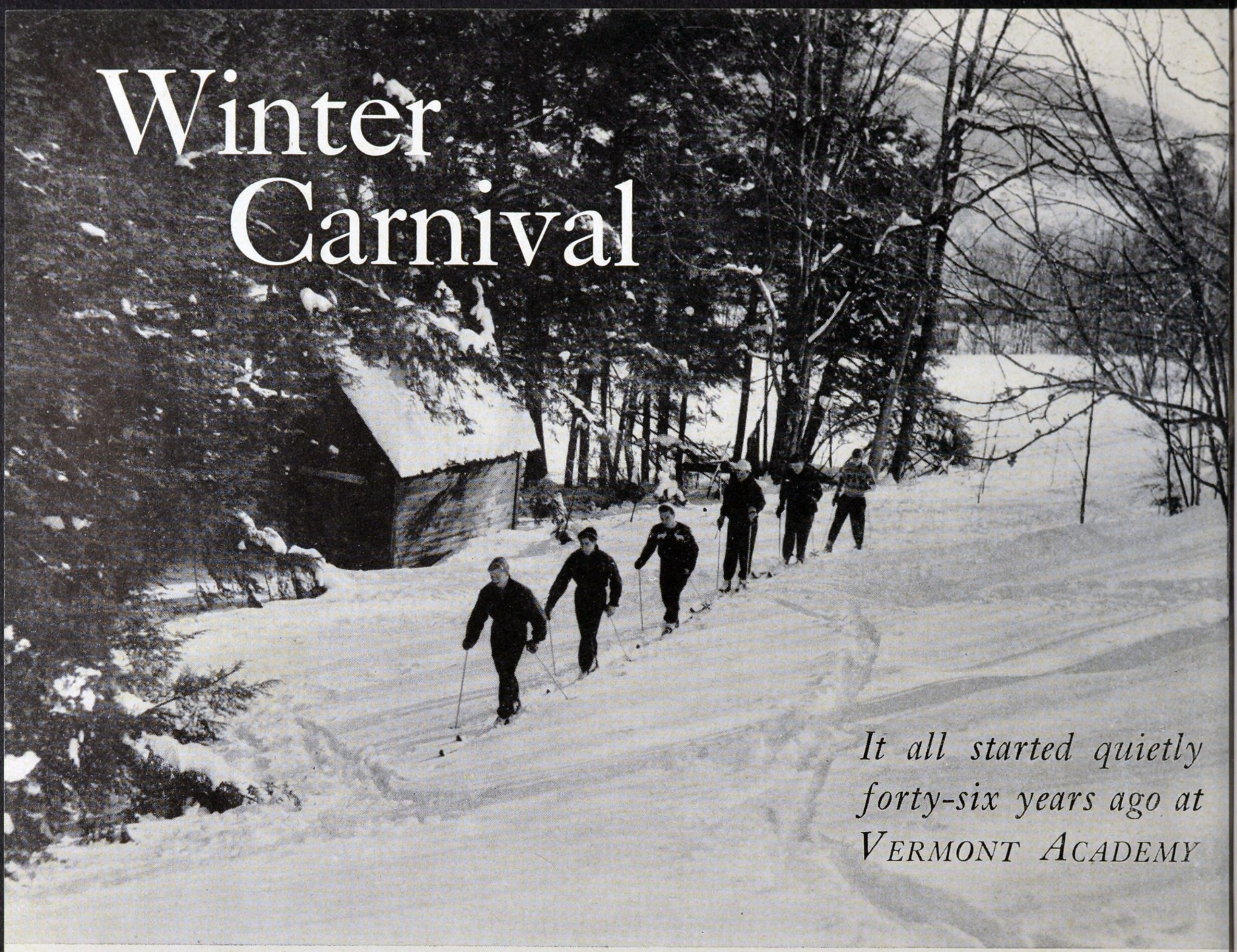
"Everybody works in the Hannah house," the head of the family says, and Mrs. Hannah's contribution, no minor one, is painting the figures her husband carves.

A native of Quebec, Hannah came to this country seven years ago and lived for a time in Florida before moving to Vermont. He knows that he can make his living in any part of the country, but he loves the state and hopes to stay here and open his studio when the time comes.

That, plus the fact that he and his wife can work together at their business, makes him happy. END

Family gathering, less 18-year-old Peter, comprises Mrs. Hannah, Duncan, Judy, 12, and father Gerald Hannah.

Winter Carnival



It all started quietly forty-six years ago at VERMONT ACADEMY

Written & photographed by

ROBERT M. CAMPBELL

IF ON SOME BRIGHT BLUE winter afternoon when snow lies deep—the kind of day that is perfect for skiing—you should happen on the Vermont Academy campus at Saxtons River, you would see skiers, lots of them. Some would be going off a 30-meter jump, others practicing on smaller jumps, some heading off on cross-country tours. On one of the nearby slopes a ski instructor would be demonstrating turns to a class.

It is only natural to find lots of ski interest at Vermont Academy, for the school in many ways is the originator of organized winter sports in New England. It was here that Assistant Headmaster-James P. Taylor organized an outing club to take the boys on mountaineering trips. This is the same Taylor who later was to establish the Long Trail.

It was at V. A. in 1909 that Taylor, realizing only the most hardy were going on his mountain jaunts, felt that something should be done to popularize winter sports and draw an even wider group from their armchairs by the fire.

Taylor organized the first school or college Winter Carnival. Today such carnivals are almost standard extra-curricular parts of every school or college in the snow belt. Naturally these affairs have grown and changed, but the spirit which Taylor expounded is still the essential part of all such carnivals and, indeed, of the whole winter sports movement today.

Vermont Academy's first Winter Carnival was a far cry from those of today. Stocking caps, turtle-neck sweaters, leggings, overshoes were the standard dress. The first carnival was mainly an intermural snowshoe competition—climbing events and obstacle races. But there was also ski competition, perhaps for the first time in this part of the country. There were gliding-to-a-stop races and races around a field. Ski jumping, too, made its appearance—death defying leaps of 15 to 20 feet from a small, snow takeoff thrilled the crowd.

Today the annual Winter Carnival is still the big social activity of the year at

Millard Bosworth

More ski jumping is done at Vermont Academy than at most schools and colleges. Here is a competitor in midflight. A larger, 30-meter jump was constructed three years ago.

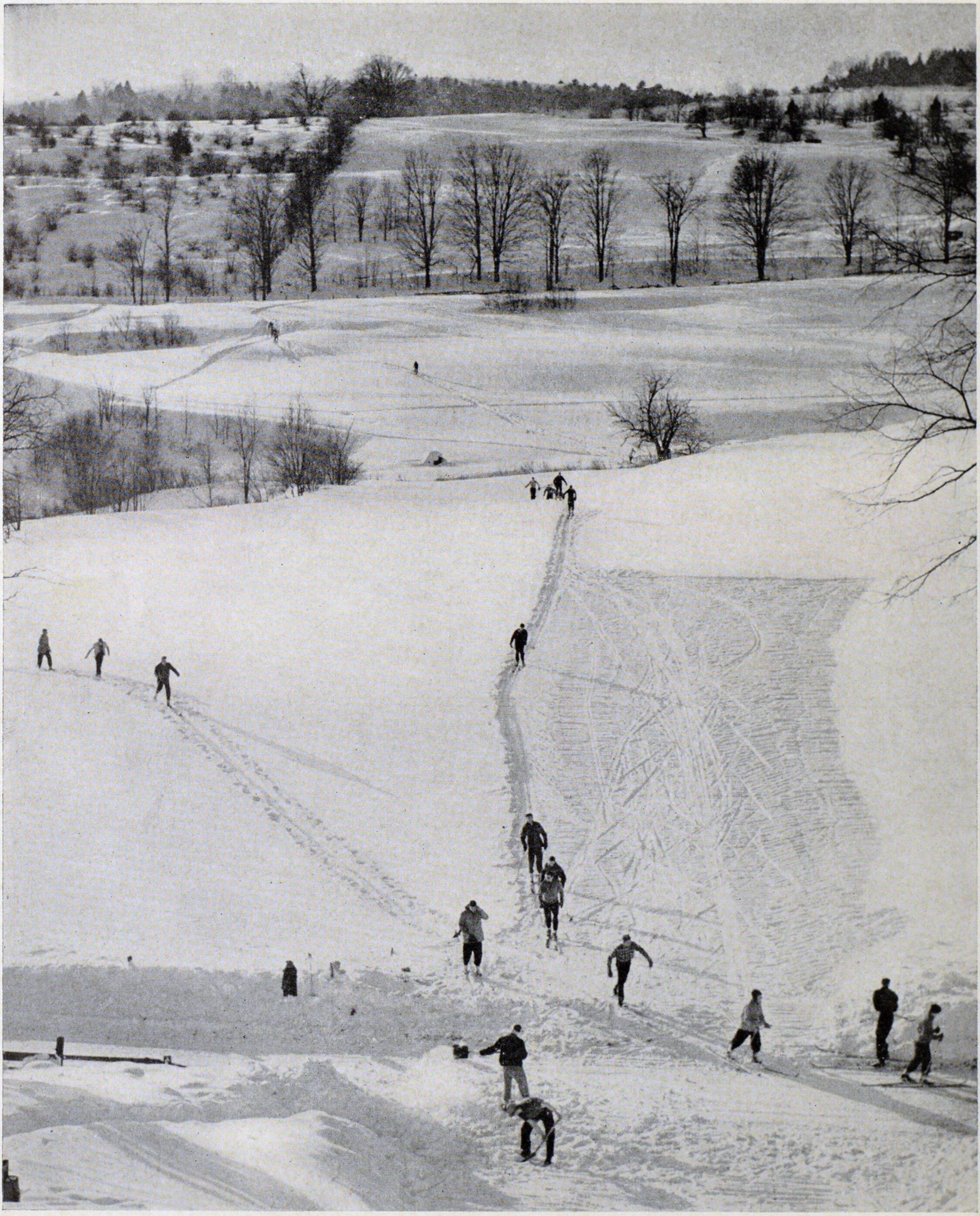
Vermont Academy. Sponsored as it was in the early days by the outing club, the Carnival is a three-day affair, which sees students and their dates, who come from various and distant points, enjoying winter in the spirit that Taylor first envisioned.

Each year the different dormitories vie in snow sculptures. There are basketball and hockey games. But the highlight is the four-event ski meet with two or three other prep schools. In the evening there is a Carnival Dance. To conclude the weekend the outing club puts on a mid-winter picnic. Eating a hamburger while sitting on a snow bank is a new experience for many of the dates, but they quickly get into the spirit. What matter if your equilibrium may be suddenly upset by a snowball!

Head of the winter sports program and coach of the varsity ski team is Warren Chivers, former Olympic skier. In training competitive skiers Chivers' goal is the development of the all-round skier. No specialists are allowed on his team. A boy must be prepared to compete in downhill, slalom, cross-country and jumping events if called upon. Most boys in learning to ski follow the path of least resistance and learn downhill and slalom skiing first. As a result Chivers has lots of work to do with his boys on cross-country and jumping—the Nordic events—in which he himself, incidentally, was outstanding. The skiers spend countless hours on the jumping hill and running against time around the three-mile cross-country trail . . . His teams have always rated high and topped off their last season by winning the USEASA Prep School championships.

Competitive skiing is only one part of the ski program at V.A. The beginners receive expert instruction under Nat Niles, who learned to ski in Switzerland in the Thirties. Niles' patience and manner of exaggerating every ski movement to make his points clear, has earned the praise of all he has taught.

Over half the school takes part in the organized ski program, the rest of the



For ski country, rolling and snow-blanketed, Vermont Academy's site hardly could be improved upon. This scene is near the 20-meter jump's runout.

Good-time pictures speak for themselves. The Carnival is held usually in February.

school preferring hockey or basketball. It's not unusual, however, to find many of these players out on skis for the week-end.

As the winter comes toward a close, a ski proficiency test is open to any boy in the school, with a prized ski emblem the goal. Usually 45 to 60 skiers try for it, a number of basketball and hockey players included. The test demands a very high degree of proficiency in all phases of skiing—from walking on the level to Christies, jump turns and gelandesprungs. The winner of the emblem knows that he is truly a proficient skier.

Another task which members of the ski group undertake is to help run the ski meets. Take a four-event meet on a day when Vermont Academy is meeting teams from three other schools. There will be at least 20 competitors in each of the four events, but there often are more students than that helping out as checkers, starters, timers and hill trampers.

It was quite natural that the early ski developments should have come at Vermont Academy, for the climate and terrain make a perfect combination for skiing. The Academy's ski facilities today are probably unrivaled among secondary schools and are far superior to the layouts at many colleges.

The construction of the school's thirty-meter jump is the most ambitious as well as the most interesting project the outing club has undertaken. Planned in 1939, the war tabled construction until 1948. It was dedicated at the 1952 Winter Carnival.

There is no doubt that skiing is important at Vermont Academy, and that Vermont Academy is important to the skiing world. Looking at the skiing program of the school, one cannot help being impressed by the great amount of enjoyment that everyone is getting from a sport which later will find a rewarding place in his life. END

Pictures continued on next page

Such winter picnics are new and exciting for the Carnival dates at the Academy.

A general view (right) *of the Academy campus in part, includes the ice rink and shows its mountain setting.*

Ice hockey, being played here, (below) *on converted tennis court area, is another major winter sport at V. A.*

Nat Niles, also Academy's tennis coach, (below center) *instructs beginning skiers in correct snowplow position.*

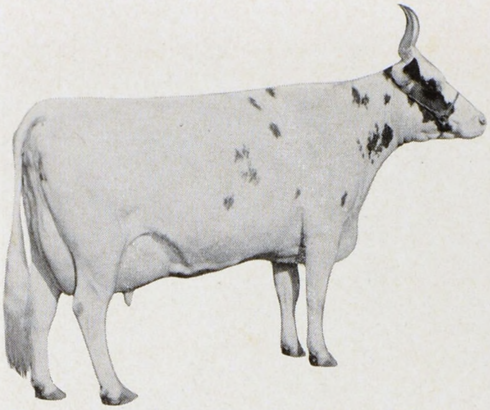
In competition, well-trained V.A. ski teams usually pick up points on cross-country (below right) *racing events.*

FINISH
1

Six Million Cows

Belong to Vermont's two Social Registers, the Ayrshire and the Holstein-Friesian cattle breeders' associations.

By Hegen Petersen



Champion Ayrshire *Strohmeyer & Carpenter*

In the Green Mountains it doesn't matter who you are. Your ancestry and the potential value of your offspring are your own affair, and if you seem regular and aren't afraid of a lick of work Vermonters couldn't care less about your family tree.

Couldn't, that is, unless you are a cow. For two of the six national associations representing the principal breeds of dairy cattle are located in Vermont, a fact appropriate enough to a state where cows by popular tradition outnumber the people. The national headquarters of the Ayrshire Breeders' Association is in Brandon, and the home base of the Holstein-Friesian Association of America is Brattleboro.

The principal concern of these groups, as it is with the other four such associations scattered across the nation, is the ancestry and production of every animal listed with them.

The Social Register, or Debrett, of any breed of cattle is a volume of statistics called the Herd Book. It lists the name and registry number of the cow or bull, its birth date, the same for its sire and dam, and so on back to the imported foundation stock. Along with the herd books, the associations compile and publish equally valuable indices of type—or conformation—and milk production.

Greenrange Farm Ayrshires

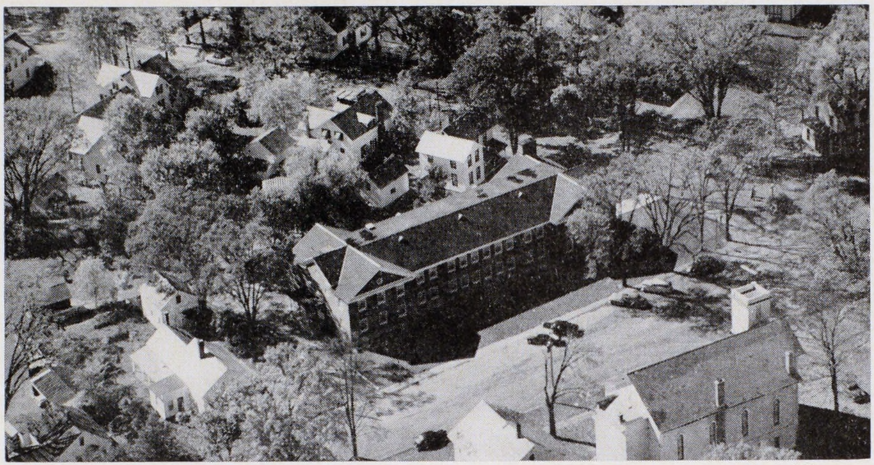
Celebrated Holstein oxen Jerry & Joe could start a dead weight of 11,061 pounds.

The Ayrshire and Holstein-Friesian headquarters, between them, keep tabs on some six million dairy cattle, or roughly half of all the registered milk-type bovines in the nation. The Smith genealogy from 1066 is not so detailed or so extensive as the cow files of Vermont's two breed associations.

Yet while owners may get a kick out of possessing registered stock, their prid is in genetics rather than social standing Unlike the humans listed in society's blu books, "purebred" cattle are the subjec of numerous and detailed records for on paramount reason: to improve the breed

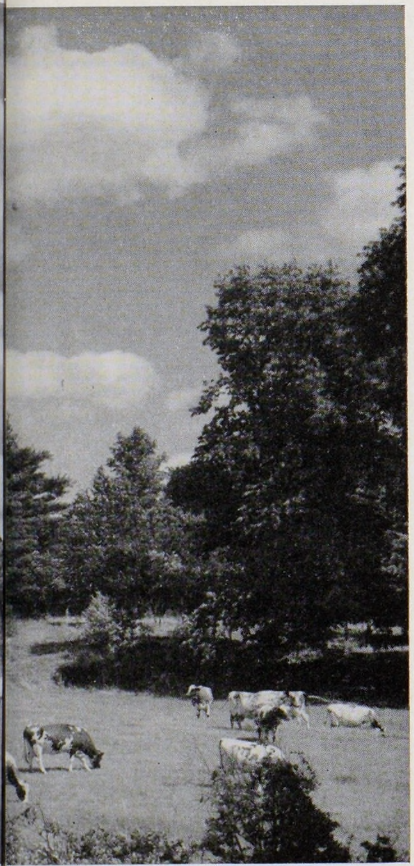
Largest of all dairy breed associations i the Holstein-Friesian group, formed i 1885 through the union of two competin associations. Since then, after the headquarters stopped roving and consolidate its offices in Brattleboro in 1939, it ha

Champion Holstein Phil Palmer



Aerial Surveys

Ayrshire's attractive new national headquarters lie in Brandon's residential section.



Parker-Anderson Studio

kept records on and promoted the big-bodied, handsome black and white cows, brought over from their native Holland a century ago. An addition made in 1952 to the building at the foot of Main street doubled the floor space and provided ample quarters for 200 employees and the modern files and office equipment that correlate records for more than five and one-quarter million head of registered cattle.

In its seventy years of activity, membership in the association has grown from the charter group of 284 breeders to the present total of 46,000 members.

Main job of the Brattleboro organization is to store and analyze statistics on the various registries: the Herd Book, the Advanced Register (milk production of individual cows recorded monthly under the supervision of the state colleges), the Herd Improvement Registry, or Herd Test, which performs a similar service for entire herds, and Herd Classification based on body conformation. The latest addition is a blood typing register which lists the antigens carried in the blood stream of every bull used in artificial breeding and comes into its own when routine records are unable to determine the proper parentage of a calf.

In addition to the records departments there is an extension service charged with breed promotion and general public relations work. It maintains a force of fifteen national fieldmen who work closely with the 400-odd state and local Holstein organizations and with individual breeders.

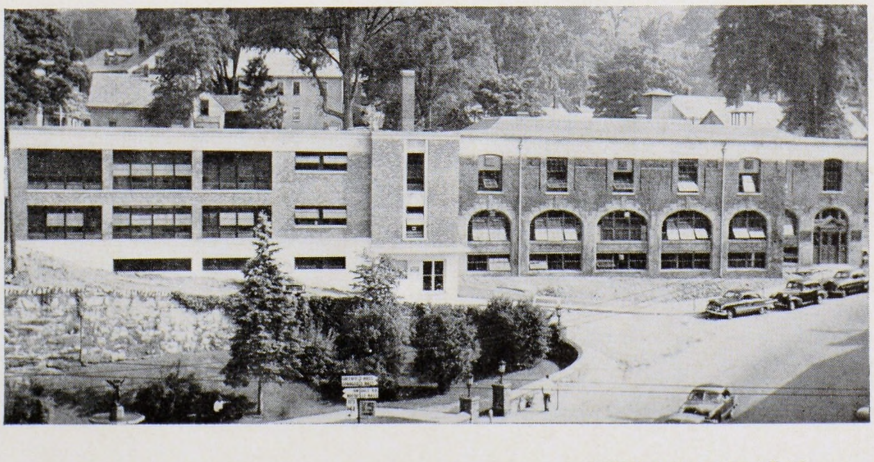
Brandon's Ayrshire association has a closer, sentimental tie with the state. The Ayrshire, the stylishly horned red—or brown—and white cow, was first imported in numbers between 1880 and 1900 from County Ayr in Scotland. The Ayrshire Association was incorporated in 1886 with a Brandon Ayrshire breeder, C. M. Winslow, as the first secretary of the corporation: hence Vermont as its home base.

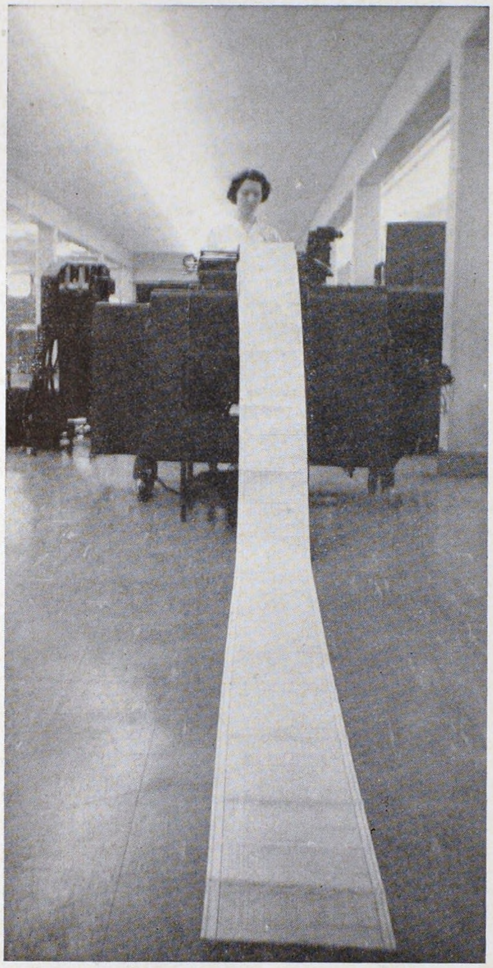
Three years ago the fast growing organization moved into a new $217,000 headquarters building. It has more than 9,000 members and keeps records on half a million cows. It, too, has a promotion service and gets out the monthly *Ayrshire Digest* for breeders, and maintains service in the field.

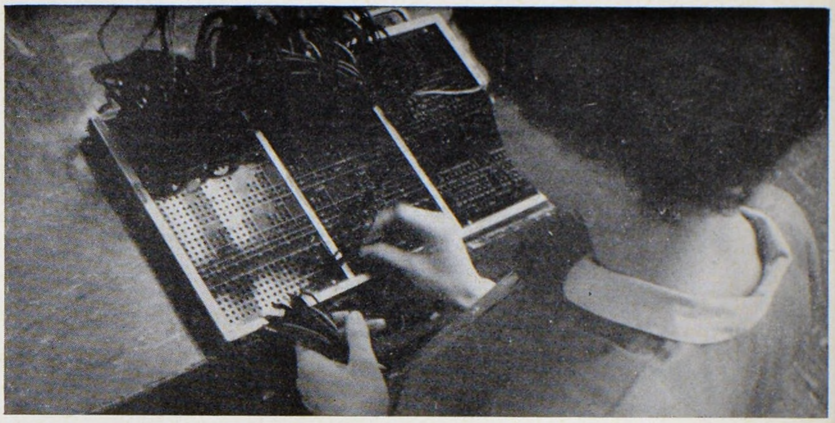
All these activities are the logical result of the breed associations' master plan of improving the build and production of their cattle. The intent and the effort were there

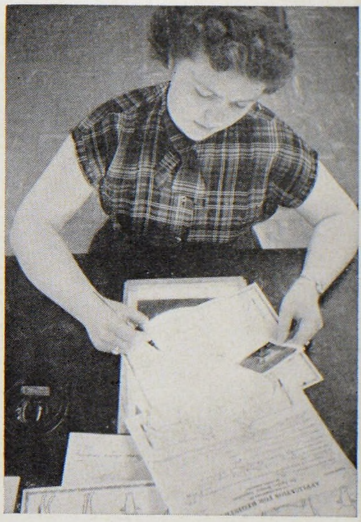
Offices of Holstein-Friesian Association of America are on Brattleboro's Main Street.

Ben Brown









AYRSHIRE HEADQUARTERS

Endless ribbon of herd statistics (left) *pours from one of the complicated IBM machines to provide latest herd records.*

Girl (above) *at Brandon sets up electronic relay board of IBM computer to derive special set of needed statistics.*

Detailed pedigree, physical statistics, markings, production and picture are recorded (right) *for each animal registered.*

IBM calculator (below) *takes unrelated information on many punch cards and comes up with printed averages for entire herd.*

Pictures this page by Neil Priessman

from the beginning, but it wasn't until computing machinery was installed that today's statistics on a cow could be fully interpreted.

First, of course, the new calf must be registered. With both associations, the animal can only get on their records if both the sire and dam are registered, too. The owner—most often the breeder—sends in a form telling name, sex, birth date, parents, place of birth, breeder and a photograph or sketch of the calf's markings. He also sends in a fee, and for this he receives a number for his animal, and the knowledge that this particular beast will be known forever by its number, and the records of its registry will be on file for all time, even if no more data on its get or its production is ever sent in.

Therefore, registering is just the bare bones of the record. Still, only from the number of live births and the incidence of sexes, it has been possible to amass worthwhile facts about a bull's siring more daughters than sons, or whether a certain strain is free or not from malformations.

But the thing that should make J. Edgar

Hoover or an anthropologist like Ernest Albert Hooton green with envy is the sort of data that can be compiled to show not only past performance or production, but probable ability and therefore fairly exact value within the breed.

For example, a dairyman in Pennsylvania wonders whether he should buy a heifer calf out of Pansy Superior Pleasant, a mythical registered Holstein two states away. He will write to headquarters in Brattleboro, where he can learn:

1) Pansy's breeder and present owner, and their addresses.
2) Pansy's sire and dam, *their* sires and dams, and so on back as far as desired.
3) Her production.
4) A sketch of her markings for identification purposes, for no two Holsteins—or Ayrshires for that matter—have identical markings.
5) Her type—whether Excellent, Good, Fair, etc.—based on body conformation. This is important, because a cow's shape has a lot to do with the amount of milk she will give.
6) Her progeny, if any, together with, their names, registry numbers, production.
7) The names, production, type, etc. of her paternal sisters, the daughters of her paternal brothers, or of practically any other members of her considerable family.

Or take the fictitious dairyman who wonders whether to keep his young Ayrshire bull, Haphazard Golden Boy.

HOLSTEIN HEADQUARTERS

As with its Brandon counterpart, much of Holstein-Friesian's personnel (above) *is employed in clerical work.*

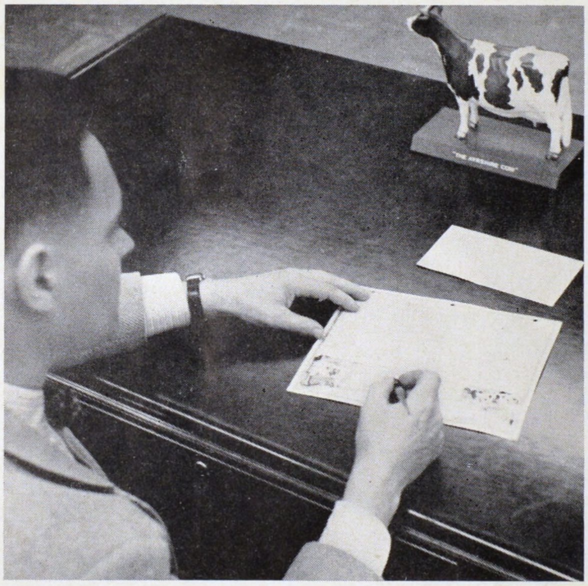
Louise Howe (right) *checks a prefix entry. Over 22,000 "copyrighted" farm names are protected by Association.*

Dick Mitchell (below left) *working this card sorter can establish a sequence by any of 80 characteristics.*

Rita Rogers starts off everything (below right) *by transferring source information onto key-punched cards.*

Pictures this page by Ben Brown

Ben Brown



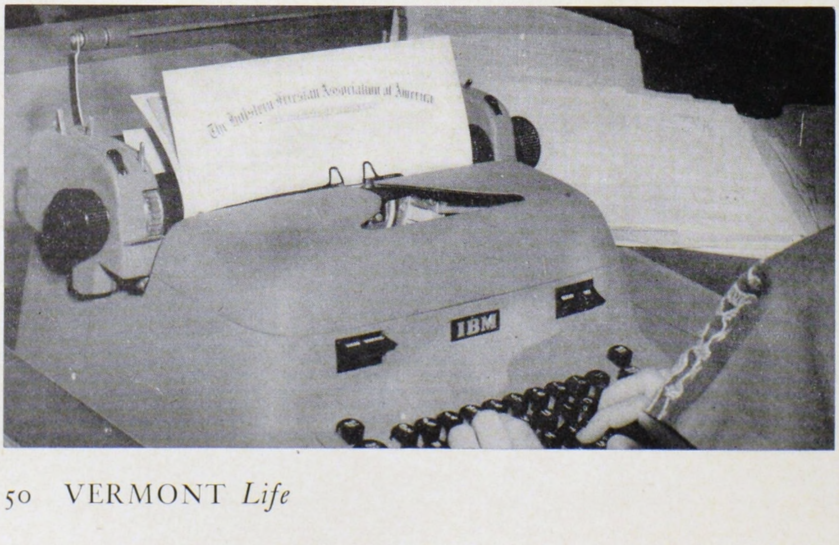
Priessman

Virginia Dinsmore (above) *refers to a Herd Book entry. Book contains over 5,250,000 registered Holstein names.*

At Ayrshire headquarters (at left) *Secretary Chester Putney signs official certificate for animal's owner.*

At the Brattleboro Holstein office a handsome Certificate of Registry is typed (below) *for an owner's herd records.*

Ben Brown



Would the calf raise herd production? He asks the association in Brandon to compare the production of Golden Boy's daughters with that of their dams. Obviously, if the daughters show a better record, the bull, as the principal new factor in the line, is responsible.

Such questions would have broken the hearts of breed associations fifty years ago, working hard though they were to supply information that fostered herd improvement. But with the new punch-card equipment each headquarters possesses now, and with the thousands of detailed facts that record-hungry dairymen pour into both headquarters each day, any such information can be gathered and analyzed at a moment's notice.

As in all the other businesses using this method of accounting, the incoming data is punched onto pieces of cardboard the size of the old-fashioned dollar bill. The cards are fed into a battery of sorters, collators, calculating punches, accounting machines, gang summary punches and card interpreters, and tough questions can be answered in a matter of minutes.

In Brattleboro and Brandon machines chatter discreetly. With every click Pansy's daughter looks like a better buy. But what about Golden Boy? It's child's play—even though a problem has come up that would have prostrated an old-fashioned roomful of clerical help.

This is the problem: a cow gives less milk in her early lactations than in her later ones, so in order to give a fair basis of comparison the production of the daughters—which has to be taken during the first year or two of their milking careers in order that the bull may not be too old before he is, in the dairyman's glossary, "proved"—a complicated conversion table must be applied.

But the machine clacks on, working out how much milk, and of what quality, the young cow would have given had she been fully matured when the test was made. This information is taken in full stride, and all the material is digested and cross-indexed, in wrung dry of any fact that applies, and the answer is ready: Golden Boy is doing OK.

It is the care and forethought evinced by such questions from purebred breeders that, more than any other single factor, has developed the comparatively wasteful animal of yesterday into the thrifty and efficient producer of today.

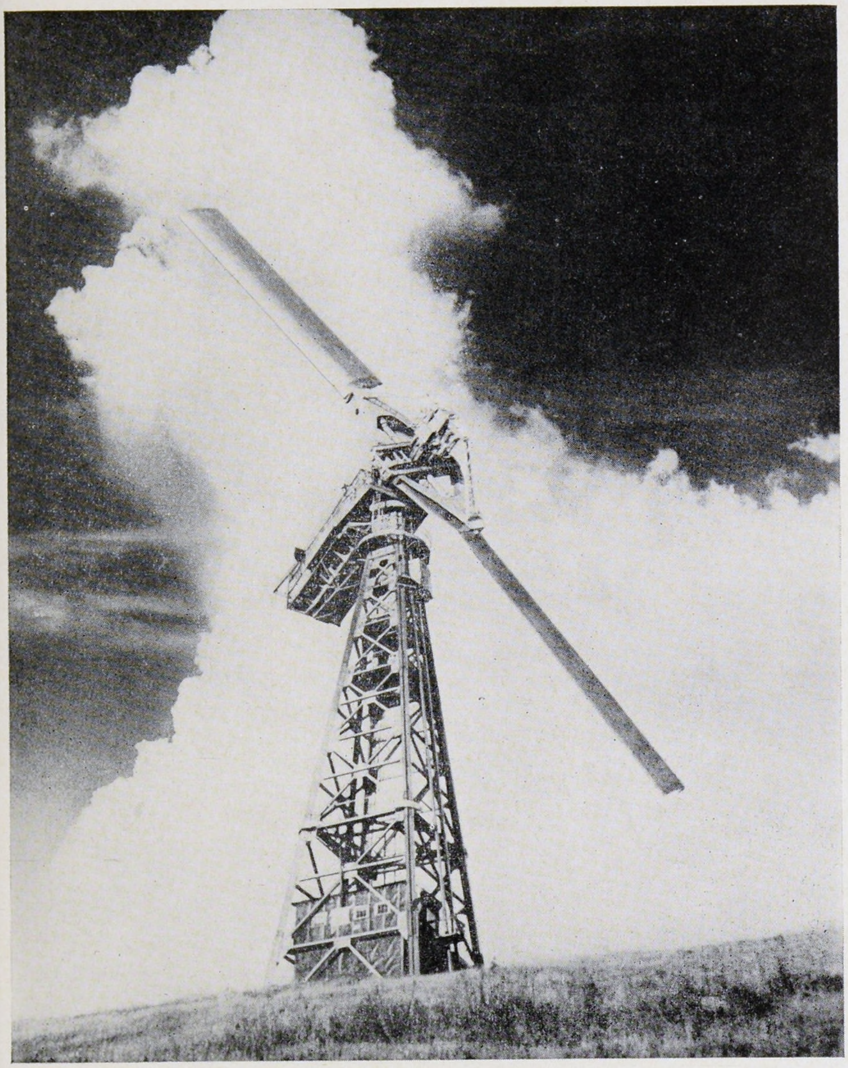
Buy Pansy's daughter. Keep Golden Boy. Out of two Vermont towns has gone the word that will make Holsteins and Ayrshires even finer cattle in the next fifty years than they have come to be through the decades gone by. END

Power from the Winds

Vermont's pioneering wind turbine crashed on Grandpa's Knob, but its short life bred a new race of windpower giants being developed all over the world.

By Lawrence M. Howard

All photographs courtesy Central Vt. Public Service Corp.



The 1250-kilowatt Smith-Putnam wind turbine test unit made electrical research history from 1941 to 1945 at Grandpa's Knob, twelve miles west of Rutland.

Even for Vermont farmers near Grandpa's Knob, 2000 foot mountain in western Rutland County, three o'clock in the morning is an early hour.

The morning of March 26, 1945, if anyone in the area had been awake he might have heard an odd swishing sound in the air if he listened closely at exactly 3:10 a.m. And a second or two later he might have heard the far away sound of steel crashing against the huge rocks that jut from the earth on the slope of Grandpa's Knob.

But the darkness would have prevented him from seeing a strange object resembling the blade of a windmill as it passed overhead on its flight to destruction. Perhaps, for the sake of his sanity, it was just as well that no one saw the queer shaped flying machine, 11 feet wide and nearly 70 feet long, shaped like the blade of a windmill, go sailing past him through the air.

Vermonters didn't pilot flying saucers of any shape, and most of them didn't believe flying saucers even existed. Vermonters used what tools they had and thanked the Good Lord they didn't waste their time on foolish inventions. But a few of them who knew the real story behind the early morning flight of that strange craft were sick at heart that day.

They knew that one of the most amazing scientific research projects in history had been crushed to death on the rocks of Grandpa's Knob. Six years of painstaking work by some of the best scientific minds in the country, working closely with many Vermonters, lay buried beneath the broken craft that resembled the blade of a windmill.

The crushed blade was from the Smith-Putnam Wind Turbine, a little publicized

Frank Mason (standing), chief engineer of Nepsco Services, Augusta, Maine; Palmer C. Putnam, manager of the Smith-Putnam Wind-Turbine project; and Albert A. Cree, president of CVPS, studying topographic map of Vermont while considering various mountain-top sites for the experimental project.

At Right: *Camera catches a study in lights and shadows as huge windmill revolves to generate electricity flowing into transmission lines, first time anywhere in the world power from the wind had been so harnessed for use.*

device developed to harness the winds of the earth for power. It was the wind that crushed it.

But not completely. Before it was destroyed, the wind turbine did something that had never been done before. Scientists everywhere still talk about the fantastic success of the little known project centered among the Vermont hills. And some day, when man starts out again to harness the wind on a gigantic scale, he will pick up the job where the Vermonters and their friends left off.

There was very little known about the wind in October of 1939 when the S. Morgan Smith Company of York, Pennsylvania, manufacturers of hydraulic turbines, decided to explore the possibilities of large scale wind turbines, using a design under development by Palmer C. Putnam, a Boston engineer who later became a consultant to the United States Atomic Energy Commission. Man had powered his ships by wind for ages, and small farm generators to grind grain, pump water and supply small amounts of electricity dotted the country. But harnessing the wind on a large scale for commercial generation of electricity was something else again.

The Central Vermont Public Service Corporation of Rutland was selected as the guinea pig for the daring experiment. Albert A. Cree, president, and Harold Durgin, vice president and chief engineer, were both intrigued by the idea of finding a plentiful supply of power that could augment what they already took from their hydro plants in Vermont.

It was agreed the Vermont utility would provide the site for the experiment, construct a road to the mountain top, supply connecting facilities to its transmission lines, operate and eventually buy the completed unit.

The vast scope of the research into the habits of the wind and the development of the turbine has never been realized by the general public. Experts from one end of the country to the other contributed their talents, some full time and some part time, as Putnam marshalled his forces like a modern Don Quixote to do battle against an element everyone knew but no one understood.

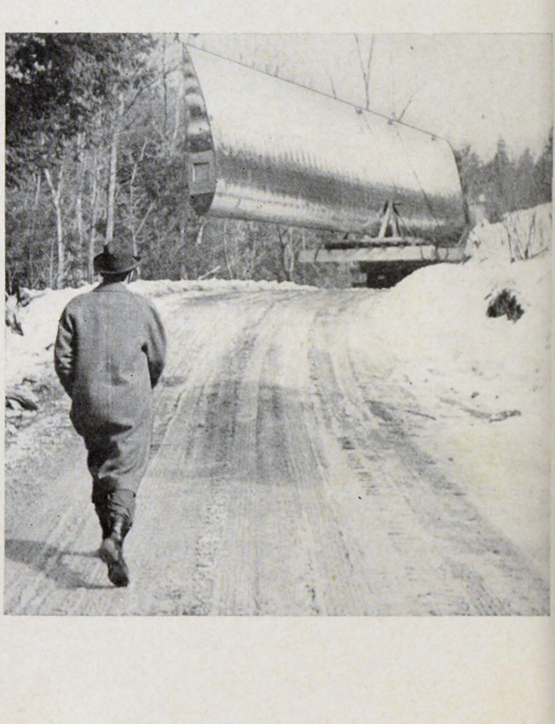
Putnam had decided from years of study and observation that a 150-foot windmill placed atop a medium sized mountain would probably be the best approach to harnessing the wind for electrical use. The site for the experiment, 12 miles west of Rutland, was selected in the spring of 1940 and the bald hill, immediately christened Grandpa's Knob, was purchased from the farmer whose grandfather once owned the mountain.

Many strange sights met the eyes of neighboring Vermonters during the next few months as a 110-foot tower was anchored into the mountain with a 23-foot deep foundation of steel and cement set in solid rock.

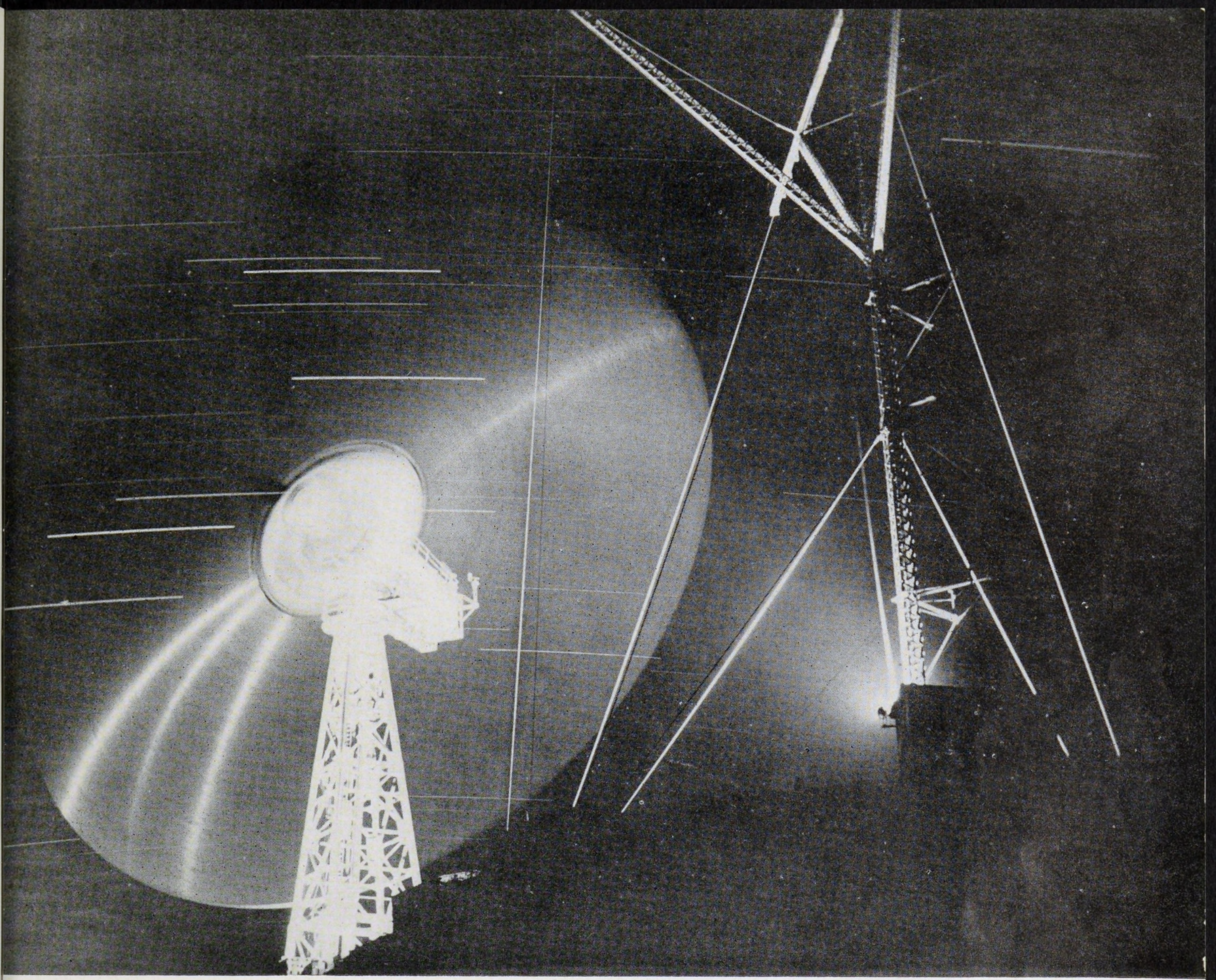
On a road built by the CVPS that summer, the 250-ton windmill was pushed and hauled uphill under great difficulties. First taken by rail to the Vermont Marble company yards at West Rutland, the heavy machinery was then placed aboard big trailers for the trip to the top of the mountain.

Bridges en route to the site had to be reinforced and power and telephone lines removed to make way for the cumbersome apparatus. It took ten trips and nearly two months to carry all the equipment to the treeless knob where, once assembled, the gigantic blades whirling in the wind were destined to turn the wheel of knowledge forward another inch or two.

Disaster nearly overtook the venture on one occasion. The main girder for the odd contraption, weighing 43 tons, was lashed to a trailer for its trip up the mountain to become a sort of bed in the sky for the heavy generator at the top of the tower.



Engr. Palmer C. Putnam following slow progress of trailer truck carrying one of the seventy-foot long, eight ton stainless steel blades to the mountain's top.



Grant H. Voaden

It almost never got there. On a hairpin turn near the top of the mountain, the girder broke its lashings and plunged off the trailer into a rock crevice.

It took three weeks to get it back onto the trailer. Miraculously undamaged, the huge girder was tugged and hauled the remaining distance to the mountain top and lifted into place on the tower.

The tower itself was erected in January and February of 1941 in temperatures of 18 below zero and in winds as high as 60 miles an hour. Hauling in the main pieces of the windmill, started March 15 of that year, was completed by May 1. It took another four months to attach the two eight-ton blades to the tower where, on August 29, 1941, the mammoth stainless steel blades were rotated by the wind for the first time, 23 months after the decision had been made.

The completed windmill was an impressive sight. Visible for 25 miles, it stood straight and sturdy against the sky as clouds scudded by, with the winds that the scientists and engineers hoped would soon be working for them.

The two blades were rotated by the wind and were cushioned by an umbrella-like slide with intricate controls and safeguards to protect both the machinery and the men who were operating it.

The blades were connected by a shaft to a generator where the energy was transformed into electrical power, designed to generate 1,000 kilowatts of electricity, capable of lighting a town.

But would it?

Fifty-one days later, on Sunday, October 19, 1941, the dedicated group of men decided it was time to find out.

As top CVPS officials and members of the S. Morgan Smith Company stood by, the unit was started up in a twenty-five mile-an-hour, gusty northeast wind.

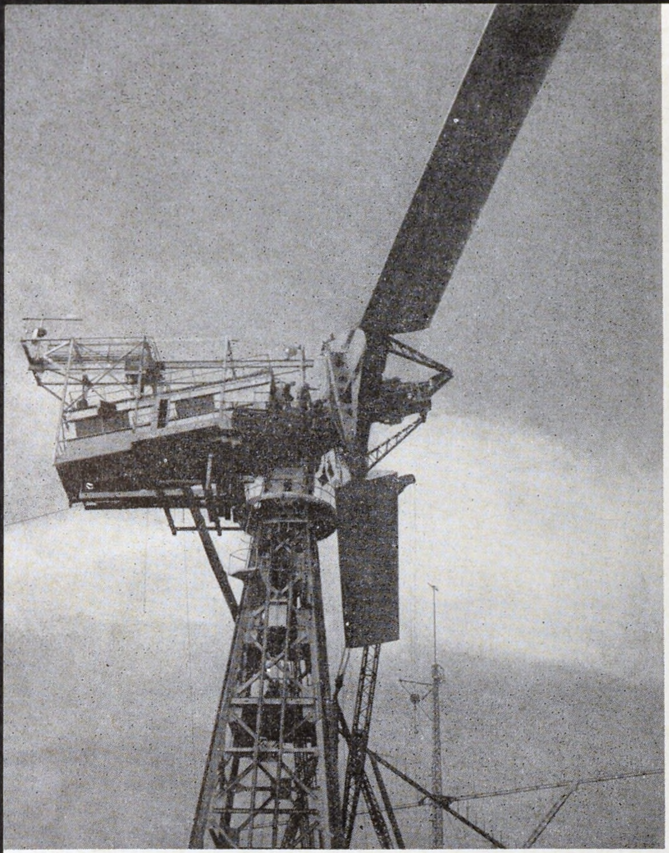
Beauchamp E. Smith, president of the company that bore his name, and Burwell B. Smith, vice president, were listening in by long distance telephone as the group at the scene waited through a tense twenty minutes while the blades were adjusted.

As the wind whipped through the whirling blades, the output was slowly raised to 700 kilowatts and for the first time anywhere in the world power from the wind was fed into an utility's lines for normal consumption.

Free air flowing over a Vermont mountain was caught and controlled, harnessed by a man-made device, and fed directly into the transmission network.

A gusty northeast wind was lighting the streets of Rutland, perhaps, or turning a dark room into a bright home for some unsuspecting Rutlander.

Did the wind that night provide the



Left: *Generator unit atop tower. Weathervane, above structure at extreme left, operated controls to a motor, which kept the entire top of the structure facing back to the wind. The wind, if unit had been operating when picture was taken, would have been from the left.*

Right: *View of Grandpa's Knob, showing substation connecting wind-turbine generator to 44,000 volt line, the control house, 185-foot anemometer mast, and the 110-foot tower carrying blades, rotating equipment and generator.*

Bottom Right: *The anemometer mast, the "Christmas Tree." It measured the vertical and horizontal distribution and the "structure" of the wind.*

power for an emergency operation at Rutland hospital during the historic 99 minutes that a windmill on a mountain top pumped electric energy?

No one knows, of course, and very few people were even aware that there was anything unusual going on that night on a mountain top 12 miles west of Rutland.

The Smith-Putnam Wind Turbine, as it had come to be known, was phased into the CVPS lines at 6:56 p.m. that Sunday. It ran until 8:35 p.m. before it was shut down to allow those at the site to evaluate results of the first successful commercial generation of electricity from the wind anywhere in the world.

Satisfied among themselves that their project would work, the elated scientists and engineers began a tedious four and one half year period of tests and adjustments to bring the windmill to the point of perfection as a wholly automatic, unattended generating station that they hoped would someday be merely one in a vast bank of wind turbines strategically located on mountain tops in Vermont and other areas of the country.

During the months of testing and adjustments the experimental unit operated in winds up to 70 miles an hour, generated as much as 1500 kilowatts and was exposed without damage to fierce gales ranging as high as 115 miles an hour over the bald brow of Grandpa's Knob.

Troubles galore rode in on some of the winds. Oil seals leaked, the stainless steel blade skins cracked, and there were troubles with mechanical and hydraulic controls due to construction and maintenance high in the air under extreme low-temperature conditions. Ominous creaking from inside moving steel framework atop the tower sent chills up and down the spines of the engineers. They even resorted to the use of stethoscopes to locate the source of the nerve-racking creaking. While the winds blew, but with blades feathered to stop rotation, crew members took turns crawling over blades and structure listening here and there for signs of possible weakening that could bring failure to some vital parts.

A major disaster overtook the project in February of 1943 when a main bearing cracked. The war was underway by then and even though government agencies had shown an interest in the project, it took 25 months to replace the bearing.

Finally, after 1100 hours of test operation over a four and one half year period, the unit was brought to a satisfactory operating condition. The decision was made to discontinue the testing and begin operation of the unit as a routine generating station linked to the CVPS lines.

During the next 23 days, starting March 3, 1945, the mountain top unit powered by free air was just another generating station of the Central Vermont Public Service Corporation. During 143 hours and 25 minutes of operation the windmill generated 61,780 kilowatt hours at an average level of 431 kilowatts.

It was running early the morning of March 26 when Harold Perry, the foreman in charge of building the tower, working aloft on the platform holding the generator, was slammed suddenly against the wall of the protective housing. He scrambled to his feet to turn off the unit, was thrown off balance again. He reached the control panel on the third try and shut the windmill down.

Only then did he learn that one of the eight-ton blades had been ripped from its shaft and tossed 750 feet down the mountain.

Miraculously, no one on the tower or beneath it was hurt. The other blade, swinging wildly in the heavy wind, was also damaged as it nicked the edge of a tower leg.

Mortally wounded, the Smith-Putnam Wind Turbine never ran again.

Before the year ended, the Smith company, which had spent $1,250,000 on the project, was forced to abandon the idea. Technically, the Turbine was a success, but the company couldn't afford to find out if it was also a financial success.

The experiment commanded worldwide attention. Queries poured in from many nations. The US Federal Power Commission began its own studies of the possibility of generating electricity commercially from the wind.

There was general agreement among scientists that they had witnessed an unusually bold venture of great significance. The few laymen who knew about the project were curious, but most thought that Cree, who was quietly picking up options on other mountain tops in the state, must be crazy if he planned to get electricity from the wind.

Dr. Vannevar Bush, president of the Carnegie Institute and head of the Office of Scientific Research and Development during World War II, was among those who realized the importance of the experiment.

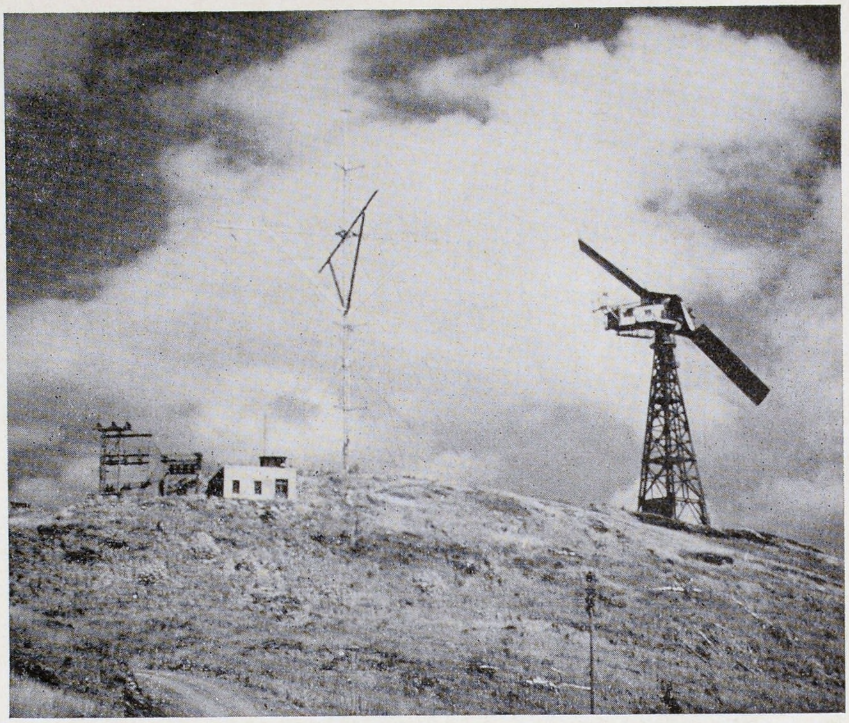
In his introduction to Putnam's book about the venture, Dr. Bush wrote that the project proved "that at some future time homes may be illuminated and factories may be powered by this new means."

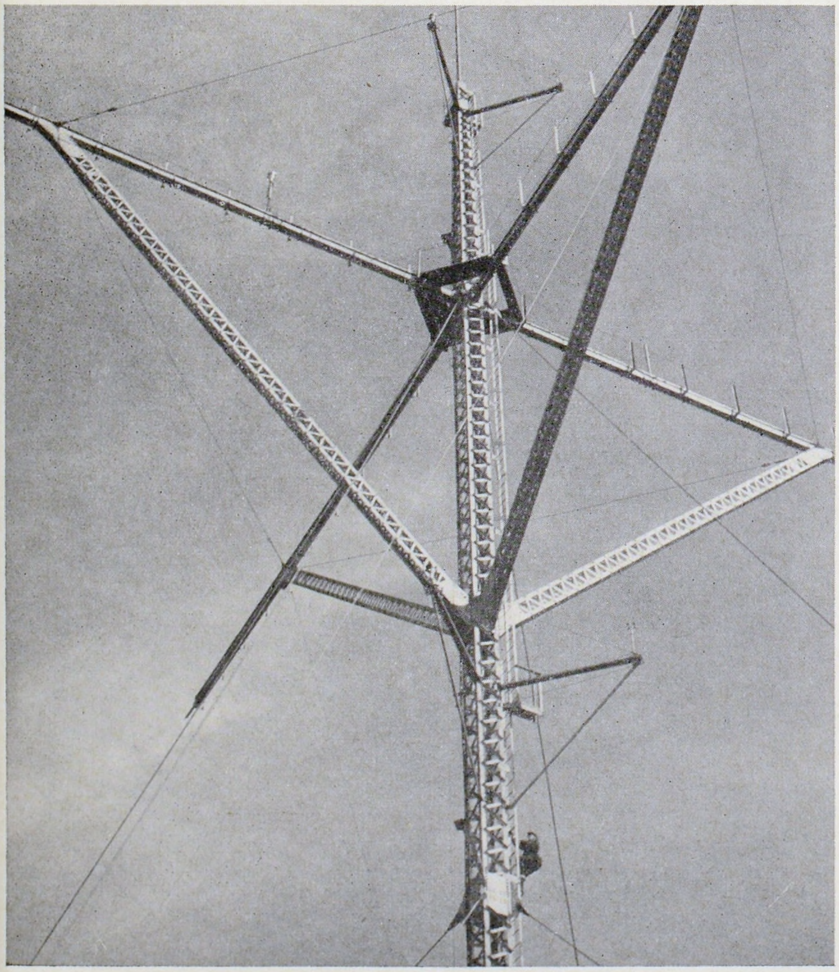
"It could," he wrote of the turbine, "fully developed, bring light, heat and power to regions that otherwise could not afford such services, or, in fact, because of physical difficulties, could not have them at all."

The Federal Power Commission, its attention directed to the possibilities of wind power use by the turbine, concluded after its own study that the project "appeared to indicate clearly that the developments in the utilization of the wind as a source of electric energy had reached a stage which merited serious consideration."

Money was the big obstacle to further development of the idea at the time. Estimates based on the Grandpa Knob experiment indicated it would cost $191 per kilowatt, delivered at a transmission line, to erect a battery of the turbines on Lincoln Ridge north of Rutland. The CVPS estimated it would be worth only $125 per kilowatt to the company.

Although beaten down by cost problems, the scientists who directed the project still believe it is possible to deliver energy from the wind at a cost comparable to the conventional generating methods.





They believe modifications and refinements of the Smith-Putnam Turbine could reduce expenses to the point where a national program could be carried out for $100 per kilowatt, well below the figure regarded as realistic by the business minds who took part in the venture.

Future development of the idea may occur far from Vermont, however. The Israel National Scientific Council is considering a network of similar turbines and the UN Commission for Asia and the Far East has urged that the vast potential of the wind be harnessed for power in those areas. Australia also reportedly is checking into the possibilities of getting more than a cooling effect from the winds that sweep in over the coasts of that continent. The British already have erected the first of a string on the coast of Wales.

All that remains in Vermont of the once proud venture is an empty corporation, Windpower, Inc., which gives its address as 121 West Street, Rutland, the headquarters of the Central Vermont Public Service Corporation.

Cree, the first and only president of the organization, says that although the company exists legally, it is only a shell organization, owns nothing but a few pencils, but which many hope will be used someday to work out the design of a new turbine to harness the wind for power.

END

The Green Mountains of Vermont

By W. Storrs Lee

Presenting an abridged chapter, WINTER SPORTS, from Mr. Lee's outstanding new book, "Green Mountains of Vermont".

From THE VERMONTER, *Nov., 1912*

"Skiing is not merely a schport," Otto Schniebs used to expound to his team at Dartmouth, "it is a vay of life." But years before the famous ski coach popularized his doctrine at Hanover on the wrong side of the Connecticut River, many long-sighted Vermonters had concluded that the least painful survival of their winters was dependent on adopting a *variety* of winter sports as a way of life. They knew all about Otto's vay.

There have always been winter sports in the Green Mountains. From the Indians Vermont settlers learned the value of web feet; a pair of snowshoes was indispensable on any mountainside farm; they hung handily at the back door, and a capable woodsman could maneuver his yard-long appendages with art and dexterity in gathering sap from his sugar bush, in felling a tree, or in trailing a rabbit. The long, gliding stride took him greater distances with less effort in winter than boots could carry him in summer or the saddle in spring, and his children found in them the attributes of fun—a clownish winter sport. For variety youngsters improvised a sled with wooden runners or borrowed from their Canadian neighbors a traverse that could rip down a crusted clearing or a packed road with the speed of a comet. Skates, scooters, toboggans, barrel staves, were added early to the resources, and winter frolics—sleigh rides, violent snowball battles, bonfire picnics, snowshoe hunts, and games like "fox and geese"—gave at least a pitch of excitement to village life between November and March. Wrote one participant after an explosive town party of 1800:

> This powwow now on Christmas day
> Which much resembled Indian play
> I think will never be forgotten
> 'Til all the hemlock trees are rotten.

For most of the nineteenth century, winter and winter sports offered an acceptable way of life to any folk with the energy to refrain from hibernation, and, as a relief to possible monotony, new fads sprang up every few years in an alert community: makeshift ice rinks, a toboggan chute, bobsled matches, harness racing with sleighs, ice sailing. In 1872 a group of Scandinavians established a

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ski club in New Hampshire, and a Vermont observer had the audacity to suggest that Vermonters might take up the sport. They guffawed instead. To Yankees the antics of these Scandinavians on skis were as alien as British cricket or boomerang throwing. In 1887 St. Johnsbury started a Toboggan Club, egged on by commercial interests eager to promote close-fitting plaids and stripes in which every well-dressed tobogganist should be attired. The club had two thriving seasons and died prematurely after a prominent Vermonter had been fatally injured on a chute. The St. Johnsbury public concluded that "plain tobogganing unmixed with other winter sports was monotonous."

In 1892 the Woodstock Inn was opened, a resort hotel built and equipped for year-round patronage. It was Vermont's first winter-sports center for tourists, and for two decades its riotous winter parties were the talk of Boston and Montreal sportsmen. Snowshoeing, skating, sleighing, and tobogganing were the reigning sports. City visitors arrived to find the town as gay and sparkling as a Tyrolese village. Met at the train by a six-in-hand and long red sleighs that could carry a dozen or fifteen, visitors were transported into a world of snow and rural glamour—jangling sleighbells and lively sled traffic, the crunch of hoofs on hard-packed streets, smoke rising from a hundred chimneys, a white village surrounded by white bald hills, and then the warm hospitality of the spacious inn. Guests did not need to be entertained; they made their own excitement. The big week of the year came with the arrival of the Snowshoe Division of the Boston Appalachian Club—fifty strong. They tramped into the hills on snowshoes by day and tramped back into the hills by night. Lighted by flares, long lines of sportsmen after dark headed for a destination like the top of Mount Tom where advance scouts had built enormous bonfires as a beacon. They climbed two hours for the reward of a cold supper around a hot bonfire. Later they sang songs, swapped tales, shivered in the cold, and eventually returned late at night under the spell of a clear moon and crackling cold. Yet to the consternation of the old-timers, more and more frequently inconsiderate members would dash off from the rest of the party in a cloud of snow on long, flat, awkward hickory boards called skis.

Altogether it was a rather small percentage of Green Mountaineers who demonstrated real enthusiasm for the wonders of a Vermont winter; and that negligence bothered trail-hound James Taylor, assistant headmaster at Vermont Academy, more than anyone else in the state. Pop Taylor was as daffy about mountain expeditions in winter as in summer, and before his plan for The Long Trail had been formulated, he had organized a school Mountain Club, the purpose of which was "to foster and encourage among its members a love for our out of door life and to promote cross country walking." The real vitality of the organization, however, depended on earning "degrees"—twenty-six of them, running from A to Z. A degree could be granted for ascending most any of the more colossal Green Mountains, for crossing Vermont on foot from New Hampshire to New York, for cooking flapjacks, venison, and hasty pudding; but "Pop's" real problem was keeping up the urge to earn a degree in winter. For this he managed to include a half-dozen specific assignments like trips on snowshoes or skis from Saxtons River to Peru or Sunapee and (Degree T) "Making twenty trips a month on snowshoes to designated tripod on Rockingham trail." Even this didn't satisfy "Pop." A campaigner of the first order, he wanted to see his boys getting a real workout in the snow. Why, for instance, shouldn't there be winter track meets in the open as well as spring track meets? Why not?

THE VERMONTER, *1912*

Vermont skiing has changed in 43 years, but these early enthusiasts in the Connecticut valley used surprisingly modern equipment, aside from boots and bindings. Poles were optional.

So, on short notice, Vermont's first Winter Carnival was held on Lincoln's Birthday at Saxtons River in 1909, with Assistant Headmaster Taylor as master of ceremonies. . . .

Taylor was not aware of it at the time, but another Vermonter from Brattleboro, Fred Harris, was preaching a duplicate doctrine at Dartmouth and in December 7, 1909, he ran a letter in the *Dartmouth* suggesting that a ski and snowshoe club be formed to stimulate interest in out-of-door sports, to schedule cross-country runs, build a ski jump, and "to hold a winter field day during February at which a program of events similar to the following may be contested: 100-yard dash on snowshoes, cross country run on snowshoes, obstacle race on snowshoes, cross country race on skis, ski jumping contest and other events that may be suggested." A month later the Dartmouth Outing Club was inaugurated in Fred Harris' dormitory room, and the following year Dartmouth had a field day exactly as founder Harris had visualized. . . .

Early ski bunny, complete with over-long poles, clasp binding and low shoes, poses by the Stowe ski dormitory. This was about 1940.

Derick

From the start Dartmouth knew that a successful snow frolic couldn't be stag. Virtuous talk about the stimulation of the great outdoors as a means of achieving academic stature was all right for the record and the profs, but a carnival could be a chilly affair without feminine support.

However, Brattleborean Fred Harris meant exactly what he said, and continued to say it. And thanks to his perseverance, he saw skis at last coming into their own as sports equipment rather than as substitutes for scooters and runners. Assuming the role of the new American authority on winter sports—which he very nearly was—Harris predicted for the benefit of anyone who would listen that the utilitarian snowshoe would very soon be replaced by the ski which was no less utilitarian but sporting too. . . . .

As founder of the Dartmouth Outing Club, originator of its Winter Carnival, and the discoverer of the woods beyond the campus, Fred Harris has been all but sainted at Hanover, but few honors have been heaped upon him in his own state where his influence was no less strong. He engineered a ski jump for Woodstock as soon as he completed one at Hanover, and later supervised the construction of the first jump at Brattleboro; he instructed the instructors of skiing; every town and institution that began to consider the development of winter sports looked to him for guidance, to model organizations he had already set up, or to his associates. And James Taylor was always in the background to aid and abet, if he hadn't managed to get there first.

The attitude of the adult public toward all this February frivolity was indulgent, but Williams College, just across the Vermont border to the south, and McGill across the border to the north were also quick to catch on to the gospel of academic stimulation by way of outing clubs, carnivals, and dates. Encircled by the confusion of enthusiasm, Middlebury and the University of Vermont were gradually converted, and a Middlebury editor climbed on the band wagon in 1917. Middlebury's Outing Club was prodded into existence that year, but preoccupation with World War I and the reluctance of more virile athletes to answer the call of the white world caused a lag of three years before the first carnival was sprung.

At this critical moment unexpected support from a distinguished source came to the cause of outing clubs and winter sports. In March, 1917, *Scribner's Magazine* published an exciting lead article, "American Universities and the White Outdoors." Snow in the Green Mountains, snow in the Taconics, the Adirondacks, and the White Mountains, was at last given formal recognition. Snow and winter sports became the talk of college presidents and their athletic directors, of professors and the educated public. The *Scribner's* stamp of approval gave dignity to an upstart winter activity that had too long suffered from casual quips and even undergraduate scorn. . . .

The *Scribner's* pronouncement gave any doubting Thomases the go-ahead. During the following decade outing clubs sprang up across the land, and skis appeared in mail-order catalogues as well as in fraternity houses.

The first collegiate carnival in Vermont was strictly a 1920 version. Like the Vermont Academy venture, it was actually a sort of track meet on snowshoes and skis, set in the open fields and slopes west of Middlebury College. There was a two hundred and twenty-yard dash on snowshoes and a two hundred and twenty dash on skis; there were distance snowshoe runs and distance ski runs of approximately three miles; a few daring upper classmen risked their lives on a ramp called a ski jump erected for the occasion halfway down a forty-foot rise of pasture land; and there were the usual obstacle races in which contestants on snowshoes and skis climbed through barrels, over saw horses, and under barbed-wire fences, known as "sweater hazards," for the amusement of a handful of frozen spectators, faculty officials, and themselves. It was strictly intramural competition won by the seniors with an accumulation of thirty-two points.

This was the men's carnival. The co-eds, in deference to their natural modesty, were segregated on Chipman Hill two miles away, where they were put through their paces in seclusion. . .

Later Middlebury carnivals were to go in for serious intercollegiate competition, for tobogganing in the glare of rockets and Roman candles, for spectacular jumping and colorful ice shows, but no generation of students ever had more fun in the snow than those of the 1920's.

Meantime sports-minded towns like Brattleboro, St. Johnsbury, and Stowe had established thriving outing clubs for young and old. Fred Harris, of course, was the president of the Brattleboro club and with all the experience he had gained at Hanover, the town had the best leadership in the state. St. Johnsbury maintained a carnival atmosphere during the entire winters of 1921 and 1922. A new toboggan chute was constructed on the golf course. Follow-the-leader snowshoe hikes were scheduled at night and scores of citizens trekked off into the darkness carrying torches to try out the abrupt climbs, the hazardous maneuvers through and over fences, and the sheer plunges down white cliffs. For the more venturesome there were occasional overnight ski runs into the hills, and when the snow was just right, the police obligingly closed the steeper streets to let the traverses and their complements of fifteen or twenty adult children take over. Then on Saturday afternoons Main Street was closed for harness races—a spectator sport borrowed from Lyndonville where it had been going on for a decade and a half.

But the greatest enthusiasm at St. Johnsbury was for skating. A fireman had thought up the idea of veneering packed snow on a huge common with coat after coat of spray when the thermometer was twenty below. The experiment was an enormous success. "There has never been such a ransacking of attics and sheds," a skater claimed. "Skates of every vintage were exhumed and though moth and rust had been corrupting in the usual style, enough steel and leather was available to allow unbelievable crowds to course around the smooth stretches."

Over in Stowe on February 1, 1921, at a meeting of the Civic Club one member lightly proposed that the town stage a Winter Carnival. Within a few days posters and moving-picture slide advertisements were on their way to neighboring towns, a ski jump had been built, toboggan slides laid out, and plans completed to every last detail. On Washington's Birthday, three weeks after the idea was popped, the carnival was under way. The University of Vermont Outing Club came *en masse;* by car, sleigh, and bus people thronged in; one hundred and fifty enthusiasts arrived from Morrisville on a string of four barges drawn by a tractor that had taken two and a half hours to cover the nine miles. There were over a thousand spectators.

The sports program led off with an event called a Snake Dance for which a long line of toboggans were lashed behind an automobile. Zigzagging from gutter to gutter, the driver swept down Main Street at thirty miles an hour shouting challenges to the tobogganists to hold on. "The toboggans were snapped about unmercifully," a reporter commented, "and the people on them had great difficulty in holding on. Several were tossed off and went flying into the snow. However, none were hurt and they declared it great sport."

For real athletes there was a two hundred twenty-yard ski dash, half-mile races on both skies and snowshoes, ski jumping—won by a U.V.M. student with a spectacular leap of sixty-two feet, bicycle sliding races on Swiss-styled bicycle sleds, and as a final spectacle of the afternoon, "Horace Melendy from Jeffersonville sent a thrill through the crowd when he rode down the street, on skis, drawn by an automobile going nearly forty miles an hour."

Green Mountain carnivals and ski meets have come a long way since those first cheerful endeavors of the 1920's. Old outing clubs died and new ones took their places. The snowshoes have gone to attics or museums. What Pop Taylor started at Vermont Academy has spread to all of the larger schools, and the Middlebury Carnival which once cost five dollars and a few postage stamps, has expanded like other college meets into a big annual enterprise of ten thousand dollars. The pasture slopes have been abandoned for mountainsides. A dozen Vermont enthusiasts have multiplied into tens of thousands.

It was the Lake Placid Olympics of 1933 that finally brought skiing as a major sport, major business, and major mania to Vermont—and North America. If the Olympics had been staged, say, at Lake Tahoe or Steamboat Springs, the Vermont snow rush might have been delayed another half-decade, but Lake Placid is only thirty miles by crow flight from the Green Mountains. Prospective skiers who witnessed the thrill of the sport and prospective promoters who visualized the kind of revenue that skiing inspired were surveying the snow-clad mountains across Lake Champlain before the season was over. Owners of mountain lands and owners of mountain lodges in Vermont suddenly realized that there was a new kind of white gold in the unproductive hills. In less than two decades Vermont capitalized on the bonanza and had developed an entirely new source of income—quietly estimated at twelve million dollars.

The development came slowly at first, but in spite of the Depression, hardware and sporting-goods stores managed to draw cash for the tools of its booming new winter business: fancy five-foot bamboo poles, leather harnesses, a strange kind of specially modeled shoe to replace hiking boots and overshoes, precision-balanced

The tobogganing vogue was at its height in 1922. The St. Johnsbury run boasted top speeds close to 70-miles-per hour.

THE VERMONTER, *1922.*

This period piece probably was titled: "Off for a Race with the Winds." It dates from the early Thirties, when toboggan chutes already were largely abandoned.

La Pierre

skis, and a whole array of tapered trousers, colorful jackets, toques, caps, and scarves. Bedecked in this astonishing armor, the winter sports crowd began its assault on the Green Mountains. The pageantry itself drew throngs of gaping natives to rural railroad stations; and the natives did not feel called upon to take the invaders as seriously as the invaders took themselves. To mountain farmers, snow was still an adversity, not a beneficence. The army of skiers was the subject of as much ridicule and corny badinage among the hosts as were felt boots, mackinaws, and Vermont lingo among the visitors. There was little rapport and only token cordiality in the reception until the hosts ascertained that the visitors had the brawn, the persistence, and the courage to match their convictions in conquering snow slopes.

The authorities, both local and state, also recognized the genuineness of the enthusiasm. Chambers of Commerce, analyzing their experience with summer tourists, quickly saw the advantages of an additional winter clientele. To accommodate the visitors, snowplows were dispatched to mountain roads which had been inaccessible from November to May since horse power gave way to cylinders. Mountain lodges that had always opened in June and closed on Labor Day were experimentally reopened in December with insulated dormitories, hot-air furnaces, and inside plumbing. Restaurants retained their summer waitresses. Railroads introduced ski trains. Tourist propaganda which had carefully avoided the subject of rigorous Vermont climate now portrayed its glories. Cartop ski racks were invented and hundreds of cars headed from metropolitan areas to the Green Mountains every week end.

The year after the Lake Placid Olympics, Woodstock put up a new gadget called a ski tow. It was the first tow in the United States, and the idea was repulsive to all who had a sporting interest in orthodox winter sports. . . . The reaction among veterans was identical to that of the Russian ski team when it was invited to use the chair lift at Grendelwald during the warm-up for the meet in 1954: "Up by chair lift, down by force of gravity—what has that got to do with honest physical culture! Sports without toil and sweat, without the satisfaction of self-denial and self-conquest, are nothing more than an amusement."

But the ski crowds coming to the Green Mountains were as much interested in amusement as physical culture. Within two decades the precedent set in the first Woodstock tow, powered by an old Buick motor, had been followed on a hundred mountain slopes in every part of the state. There were no commercial ski centers in 1933; twenty years later there were over sixty areas, ranging in extent and facilities from private pastures with a single tractor-driven tow of a few hundred feet to enormous operations like the one at Stowe, where tows and aerial chair lifts convey thousands of skiers up the flanks of Mount Mansfield and Spruce Peak, and where a valley of inns, lodges, and luxury hotels has sprung up to offer accommodations in price brackets from two to twenty-five dollars a day.

Stowe, Brattleboro, Waitsfield, Woodstock, Wilmington, Manchester, and Rutland are the major centers, but an elaborate new development may appear any season. Except for an occasional snowshoe party, Mansfield was an abandoned mountain and Stowe a winterbound hamlet two decades ago. It has since become an eastern capital of winter sports, thronging every winter week end with thousands of apostles of skiing. And innumerable other mountain outposts have experienced similar transformations. The snowbound, battered Long Trail Lodge formerly kept silent vigil over Sherburne Pass in February, but now the slopes of Pico on winter week ends are alive with humanity sweeping down the mountainsides or making the quick ascent via the tows or the half-mile T-bar lift. Between Bennington and Brattleboro are Hogback, Mount Snow, Pine Top, and Dutch Hill. The forest track west of Waitsfield, known as Mad River Glen, was a wilderness until the state pushed a broad new highway into it, and private capital put up an aerial chair lift of over a mile and a resort village. Manchester, a drab, shutter-drawn spa in winter, came to life to foster Big Bromley with five J-bar lifts and three tows, as well as Snow Valley, with a twenty-six-hundred-foot T-bar and three tows. At Brandon is a fine area known as High Pond, with good tows and a T-bar. And Woodstock, where ski-towing began, now has a Poma lift on its famed Suicide Six slope, and five tows at Bunny Bertram's, two more tows at Mount Tom Ski-Way, and forty acres of open slopes with tows on Prosper Ski Hill. Most of the intercollegiate and interscholastic meets are held at Lyndonville, Northfield, and Bread Loaf, where there are jumps as well as an assortment of other facilities. But as important as these huge establishments are the scores of little areas in mountain towns. No one in Vermont is any longer disrespectful of skiing.

Though their winter-sports vernacular may have more nasal twang than Bavarian guttural, Vermonters, like the ski *meisters* from down state, have readily absorbed the language of skiing, and talk wisely of *lang-laufing*, *sitzmarks*, *schusses*, and *gelandesprungs*. Traversing, checking, stemming, snowplowing, are a significant part of their winter vocabulary. They can differentiate between a telemark and a Christiania, and know the fine points of open Christies, stem Christies, and parallel Christies.

They have conjured up an awe-inspiring list of labels for their downhill courses, and put on maps of the Green Mountains names like Windmill, Avalanche, Corkscrew, Grand Canyon, Lord's Prayer, Shincraker, Twister, Nose Dive, Chin Clip, Teardrop Run. The construction of the more spectacular trails and the lifts to go with them has been financed by private out-of-state capital or by substantial in-state corporations, but the great majority of the smaller developments are the product of personal contributions, chicken-pie suppers, and the sweat, toil, and cheers of villagers young and old.

For the most part the villagers confine their skiing to the modest clearings of their own creation, leaving the perilous runs to the experts, the competitive teams, and their unwary guests. But Green Mountain folk do not measure the size and significance of their big new business solely in terms of the length of lifts, the luxury of warming huts, the menus at canteens, or the credentials of physicians at the first-aid centers. It is the intensity, the suspense, the color of a great sport, that also counts—a sport that reaches its epitome in a February downhill race. . . .

This is the ultimate in Green Mountain skiing. For spectators there are bigger thrills in watching jumping events at Brattleboro and Middlebury or more concentrated grace in watching a slalom race, but for the individual skier the downhill summons all the technique, nerve, and stamina that has been developed in seasons of experience on the slopes. Most of the three million American skiers will settle for less than the ultimate, but any addict will always cast an envious eye at a skier who clips a second off his time or bests him in a stem Christie. Skiing, once trumpeted as a quiet way of meeting nature in the white, has become essentially a competitive sport.

Little groups of old-timers still tramp on snowshoes to mountain huts for oyster suppers or for an uncomfortable overnight, and a few youthful outing club members occasionally follow the same trails into the deep woods for old time's sake and for the sake of variety, but the days of utilitarian snowshoeing and toe-strap skiing are gone, and with them have gone some of the lighthearted spirit. The Carnival and Commerce have taken over.

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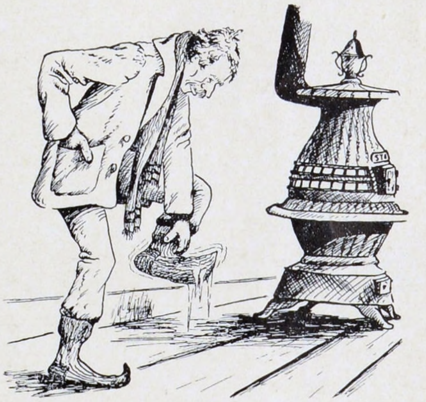
Green Mountain Postboy

(Continued from page 1)

It Was This Same Kind of then, new fangled, coal burner which Swett the tinsmith had been explaining to Miles Cone as the latter, cold from his long walk over the mountain, pulled off his moccasin rubbers and moccasins. He drew up a chair and placed his cold feet on the bottom ring while Swett went back to his books. Soon after Miles withdrew his feet and felt of them. Slowly he regained his moccasins and rubbers. He turned to Swett and said, as he shouldered his gunny sack of provisions; "Mr. Swett, I'd as soon think of settin' down and puttin' my feet on the Northern Lights t' warm 'em as on that new-fangled stove you've got there." He was gone before Swett could explain that he had been holding his feet on the ash pan section.



With No Regrets the P.B. watched the passing of the dust-spreading and often noxious gas-spreading heater. Wood, with all its demands on time and strength, was certainly preferable. And, we hasten to say, it is still in general use, on many a farm and in many a near-to-the-woods cottage. On those less and less frequent occasions when Mother Nature decides that man is getting too big for his shoes, and the power goes off, and the house gets colder and colder, then the P.B. resorts to an even earlier era than that of stoves, and learns that a fireplace is a worse glutton for fuel than any stove ever was. He admits that his civilization is really wired together, that he has become a dependent creature, the slave of the distant power producers, but Brother, it is mighty cozy in this room tonight. Glad to have you with us. END

WINTER SHADOWS, BERLIN *By* ROBERT HOLLAND, *Courtesy* THE LANE PRESS

> "The kind of New England town of which every American has an idealized mental picture, whether or not he has ever seen one, is commoner in Vermont than anywhere else."
>
> *Bernard DeVoto, 1954*